FIG. 1

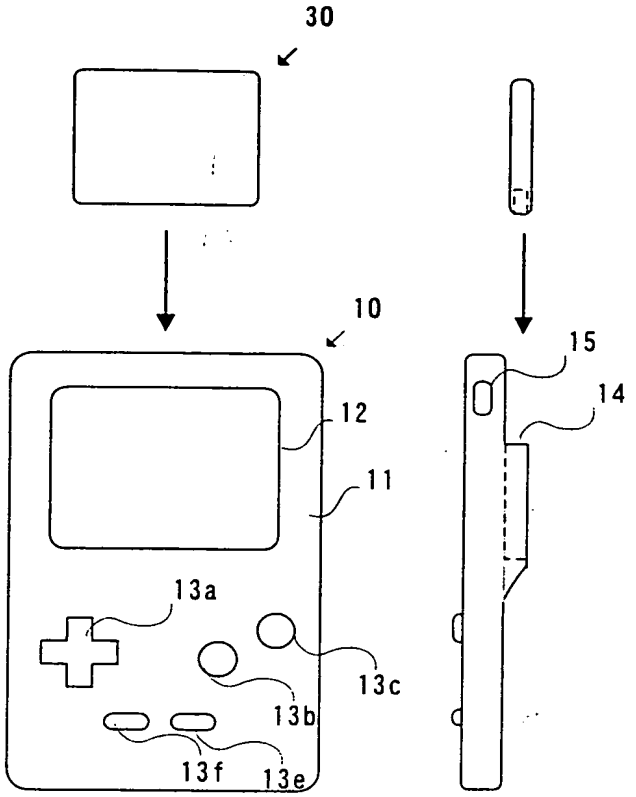

30
10
12
11
13a
13c
13b
13f
13e
15
14

FIG. 2

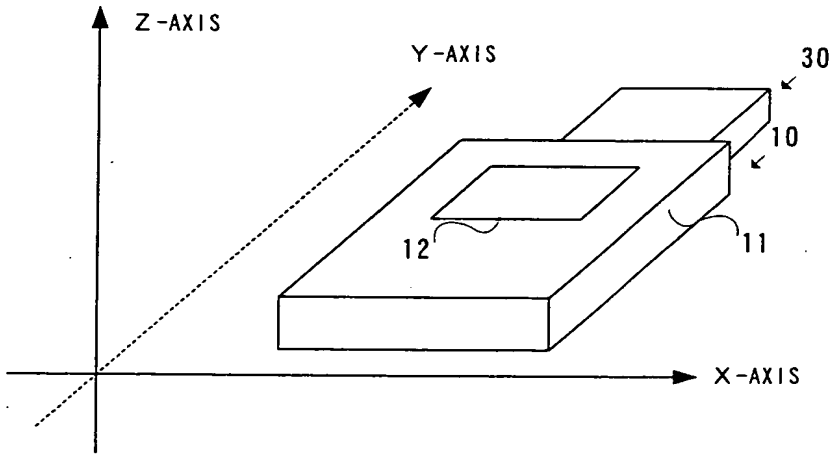

Z-AXIS
Y-AXIS
30
10
12
11
X-AXIS

FIG. 3

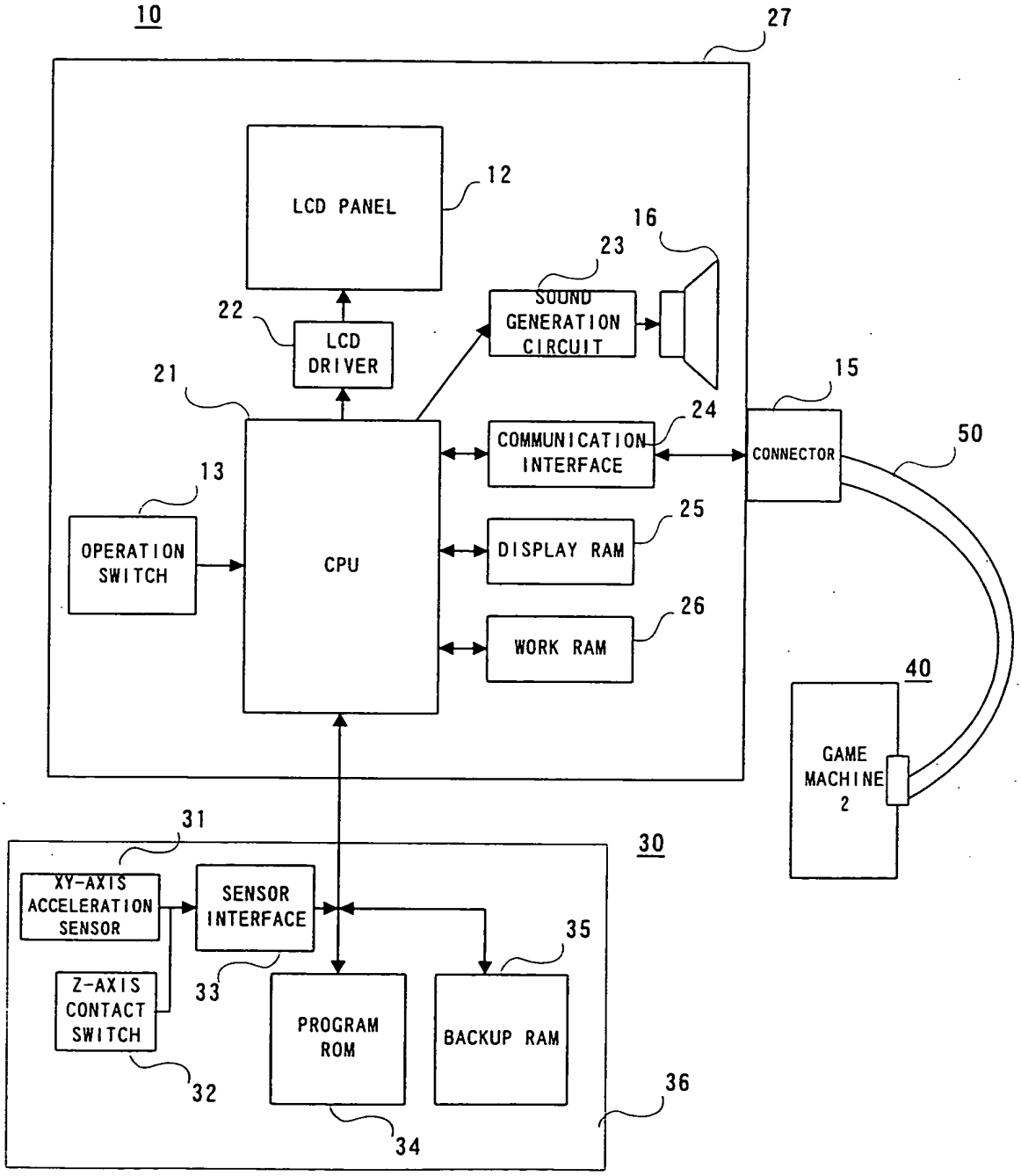

10
27
LCD PANEL
12
16
23
SOUND GENERATION CIRCUIT
22
LCD DRIVER
21
15
24
COMMUNICATION INTERFACE
CONNECTOR
50
13
OPERATION SWITCH
CPU
25
DISPLAY RAM
26
WORK RAM
40
GAME MACHINE 2
31
30
XY-AXIS ACCELERATION SENSOR
SENSOR INTERFACE
35
Z-AXIS CONTACT SWITCH
33
PROGRAM ROM
BACKUP RAM
32
36
34

FIG. 4

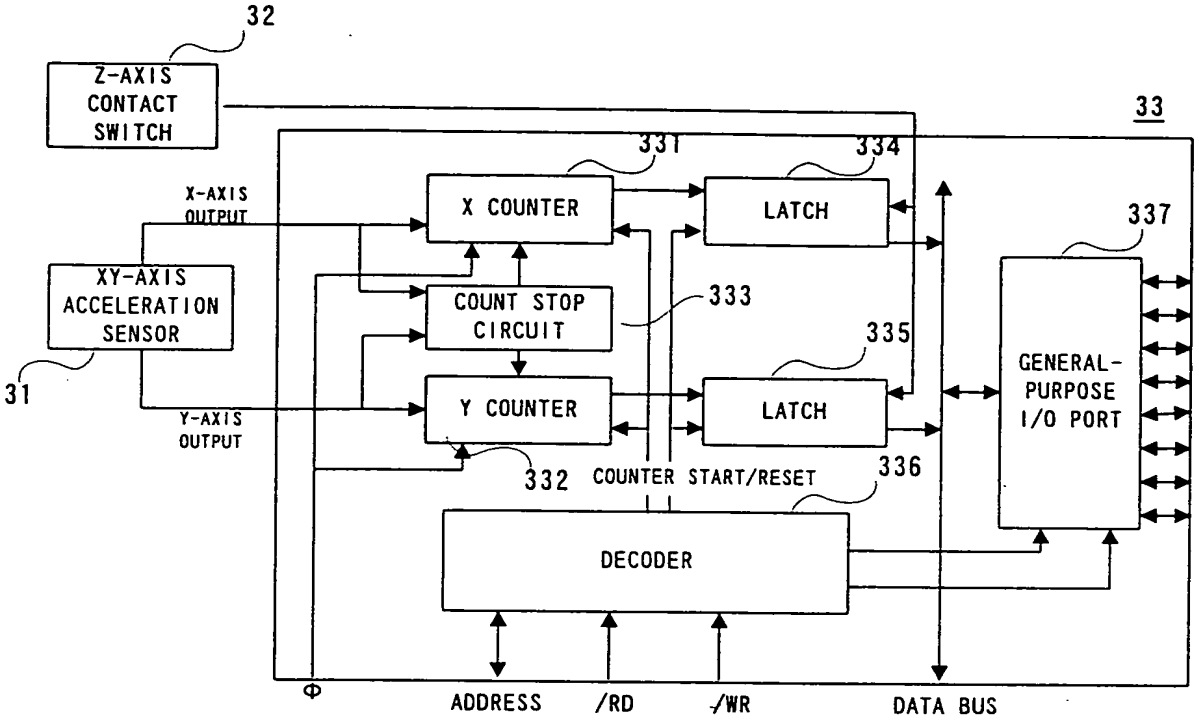

32
Z-AXIS CONTACT SWITCH
33
331
334
X-AXIS OUTPUT
X COUNTER
LATCH
337
XY-AXIS ACCELERATION SENSOR
COUNT STOP CIRCUIT
333
335
31
Y COUNTER
LATCH
GENERAL-PURPOSE I/O PORT
Y-AXIS OUTPUT
332
COUNTER START/RESET
336
DECODER
Φ
ADDRESS
/RD
/WR
DATA BUS

FIG. 5

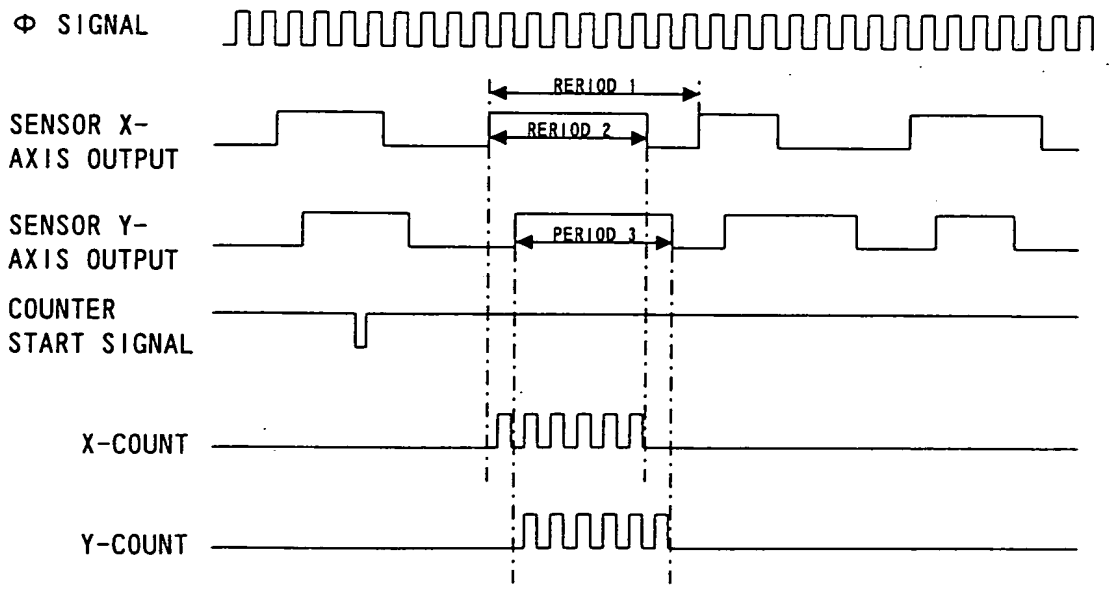

Φ SIGNAL
RERIOD 1
SENSOR X-AXIS OUTPUT
RERIOD 2
SENSOR Y-AXIS OUTPUT
PERIOD 3
COUNTER START SIGNAL
X-COUNT
Y-COUNT

FIG. 6

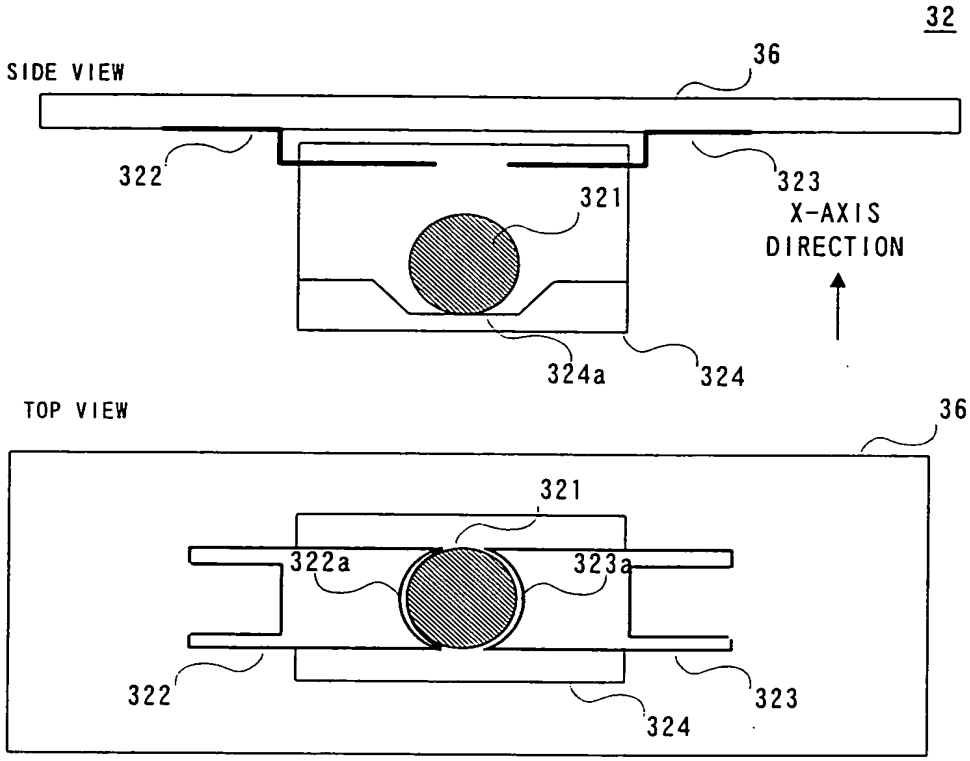

32
SIDE VIEW
36
322
323
321
X-AXIS
DIRECTION
324a
324
TOP VIEW
36
321
322a
323a
322
323
324

FIG. 7

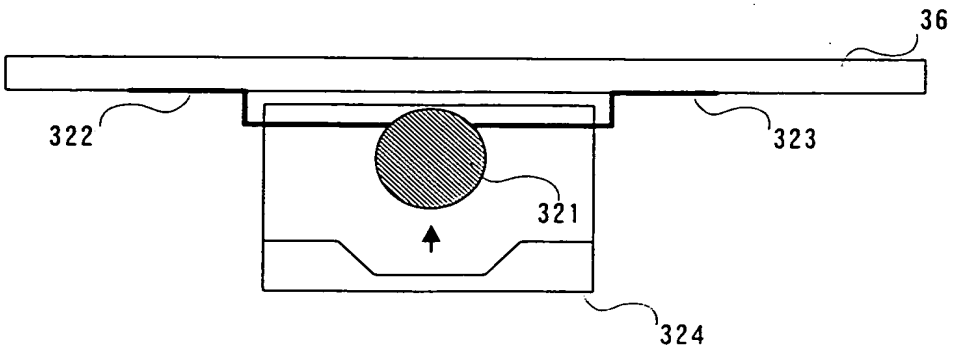

36
322
323
321
324

FIG. 8

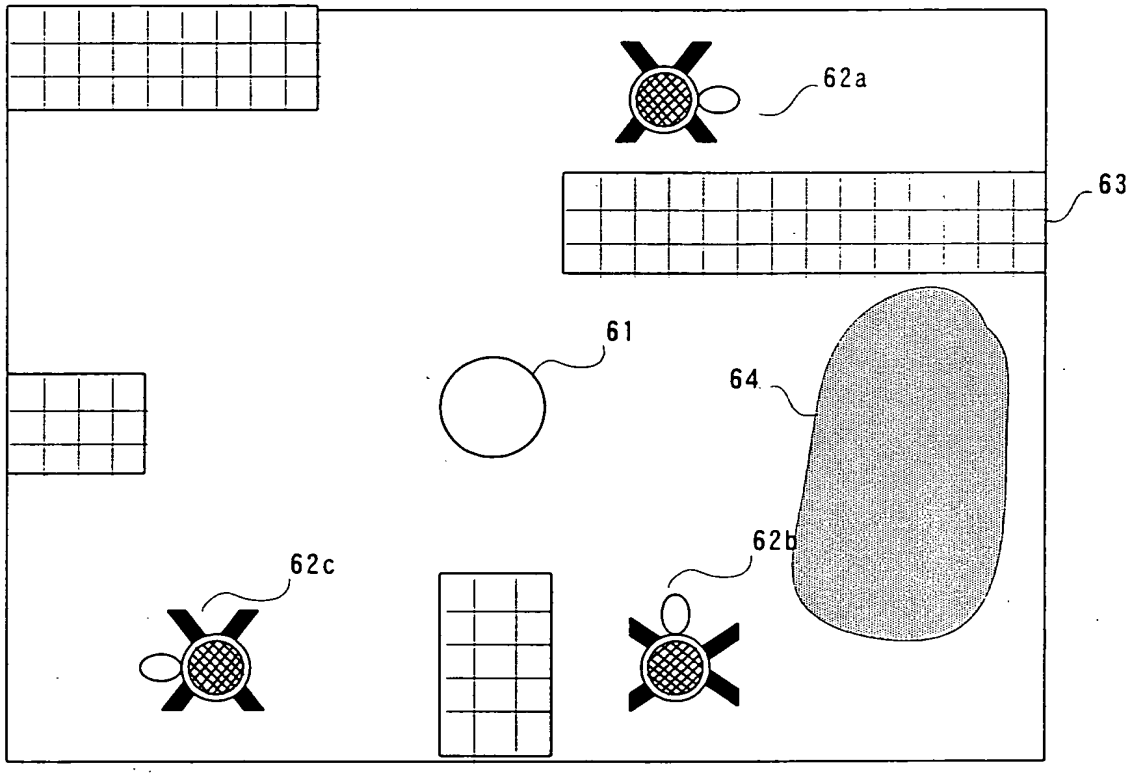


FIG. 9

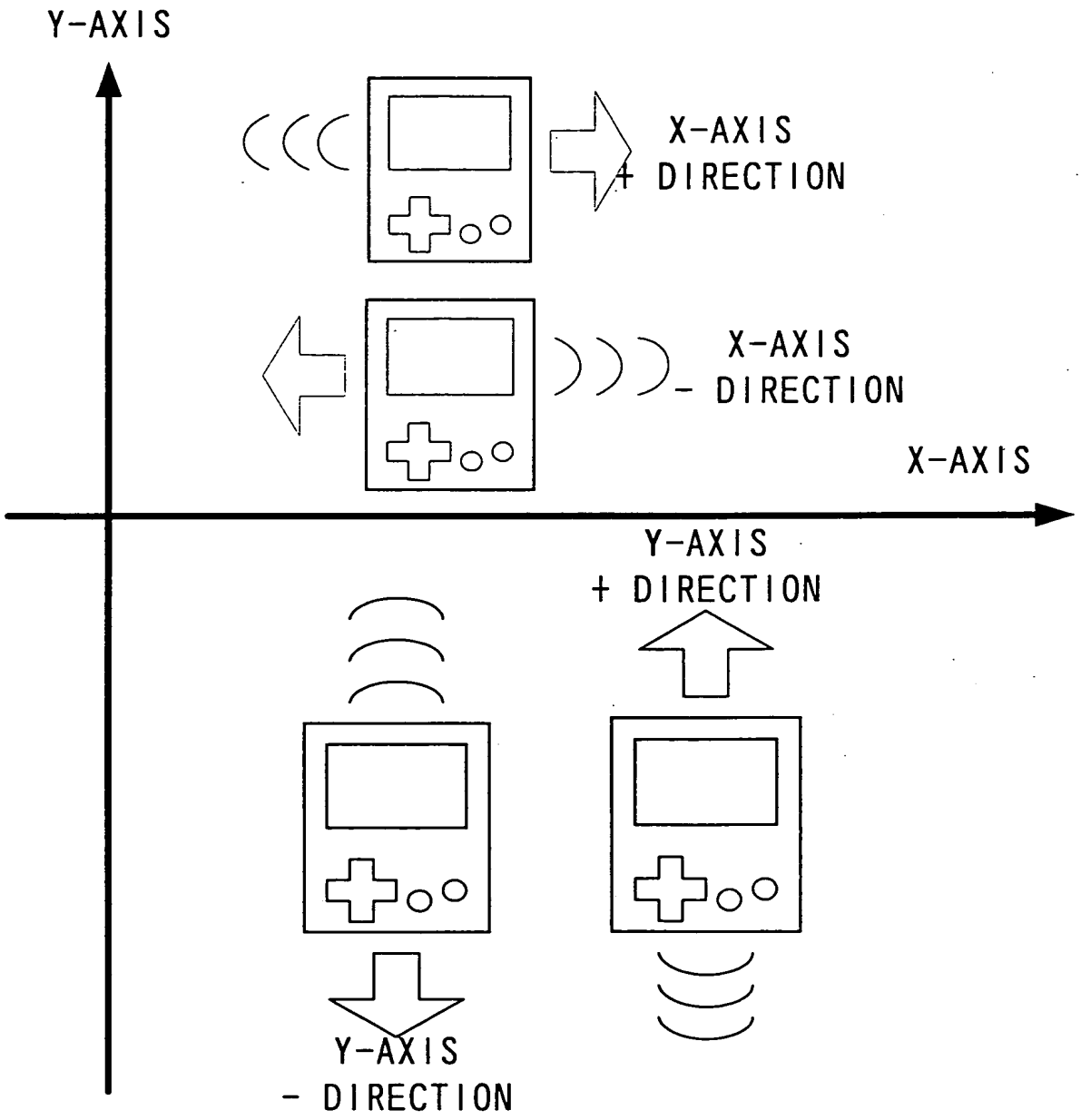

Y-AXIS
X-AXIS
+ DIRECTION
X-AXIS
- DIRECTION
X-AXIS
Y-AXIS
+ DIRECTION
Y-AXIS
- DIRECTION

FIG. 10

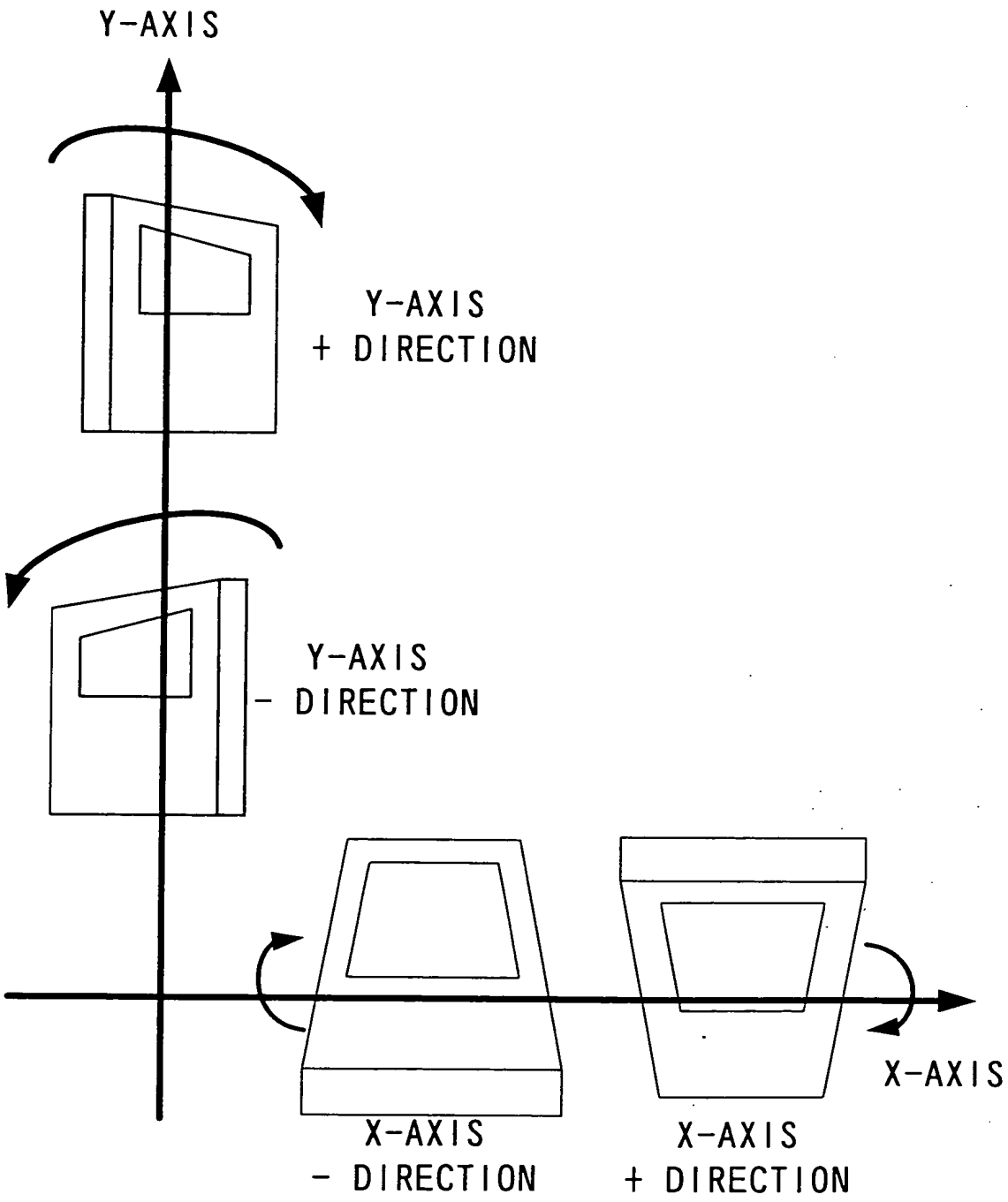

Y-AXIS
Y-AXIS
+ DIRECTION
Y-AXIS
- DIRECTION
X-AXIS
X-AXIS
- DIRECTION
X-AXIS
+ DIRECTION

FIG. 11

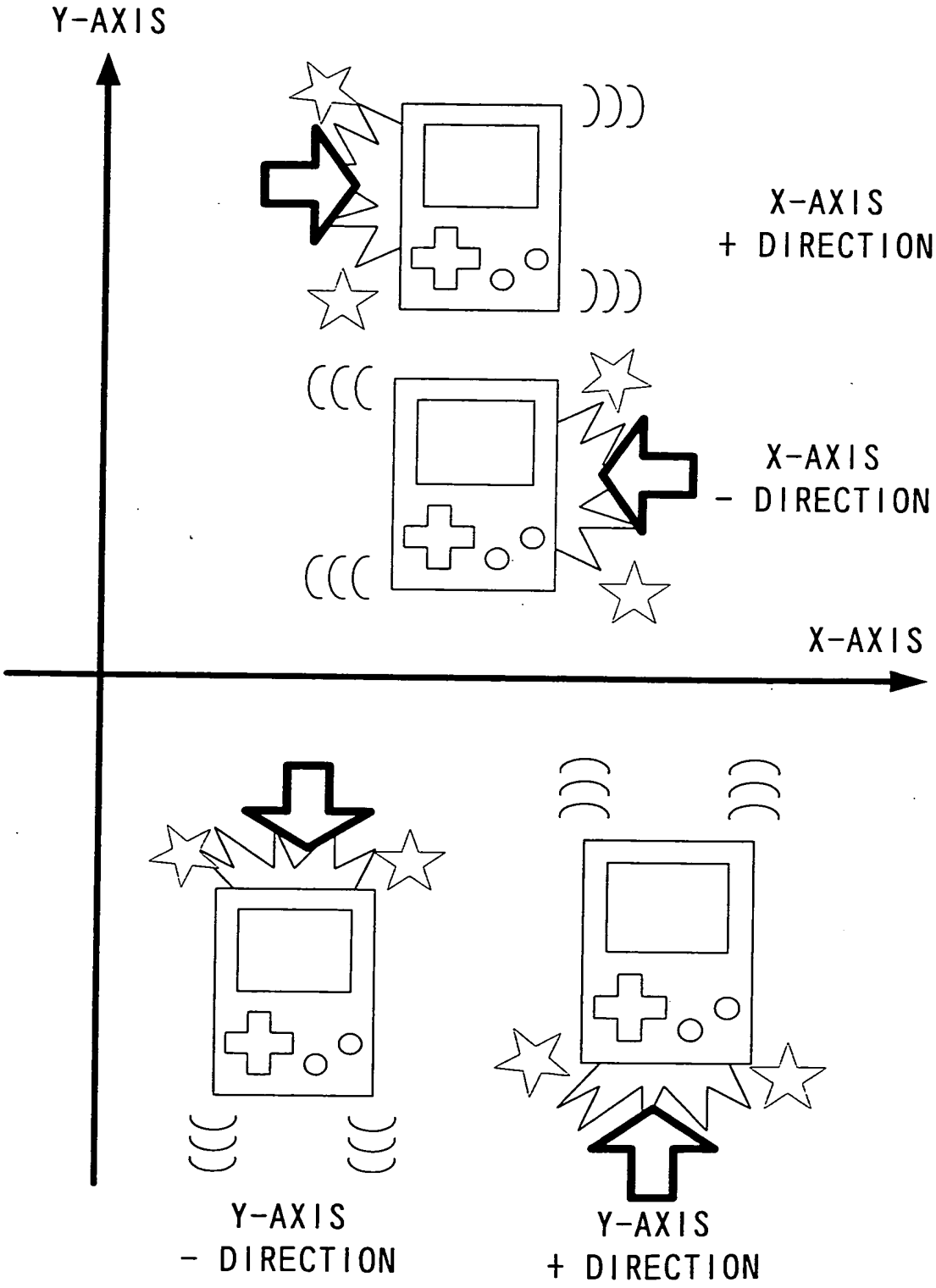

Y-AXIS
X-AXIS
+ DIRECTION
X-AXIS
- DIRECTION
X-AXIS
Y-AXIS
- DIRECTION
Y-AXIS
+ DIRECTION

FIG. 12

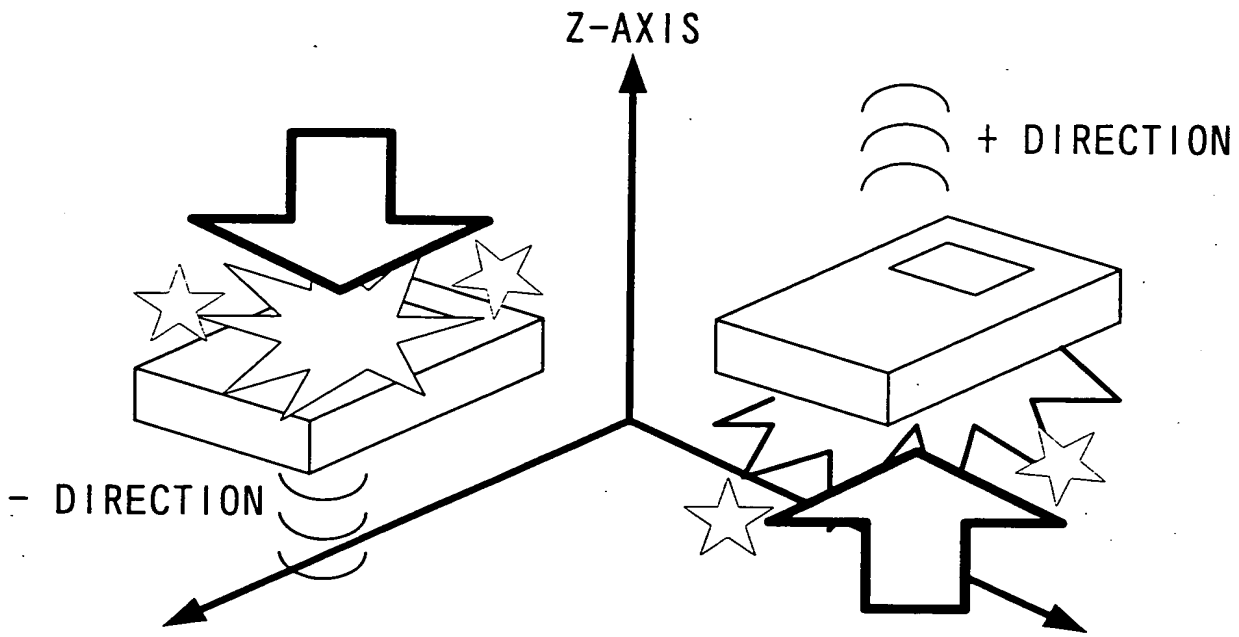
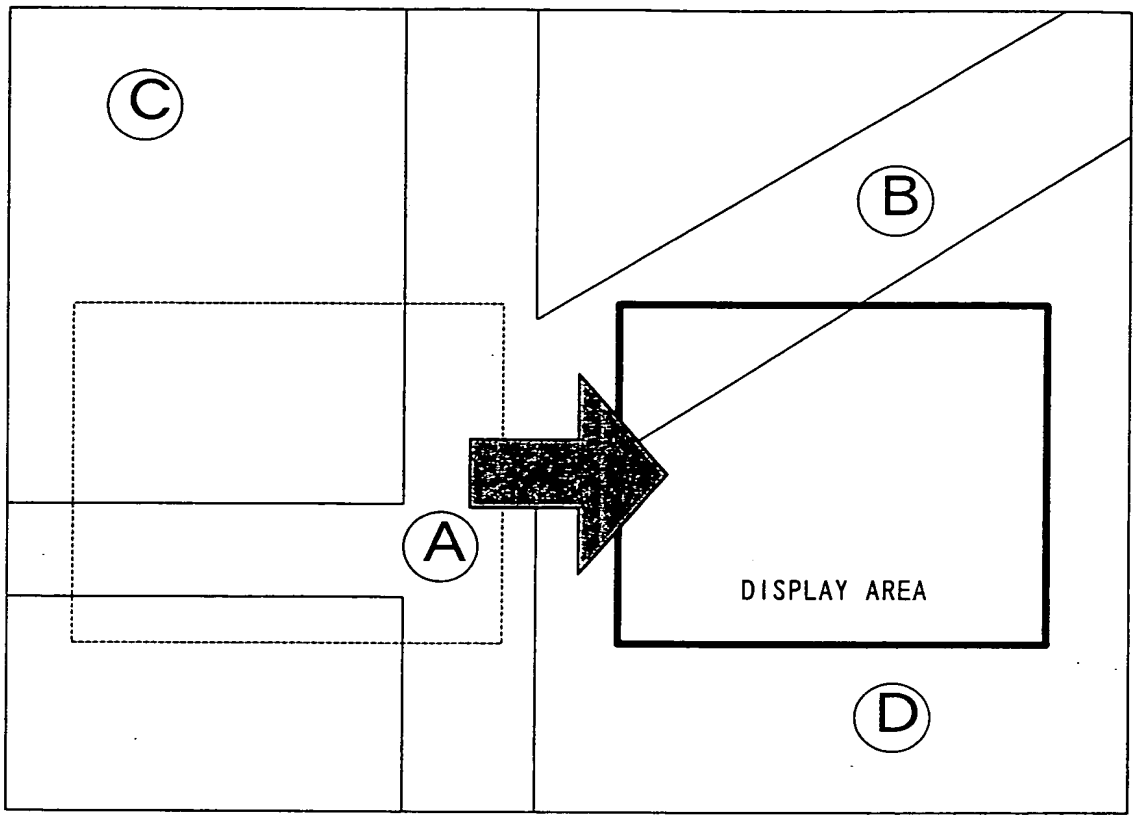
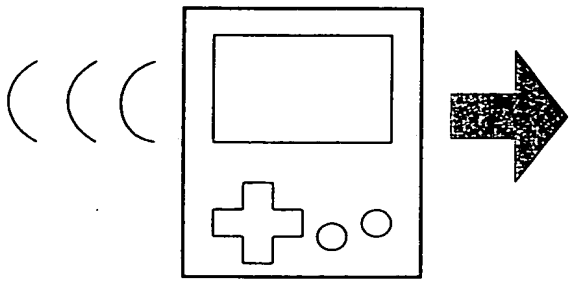


FIG. 13



VIRTUAL MAP



SLIDE

FIG. 14

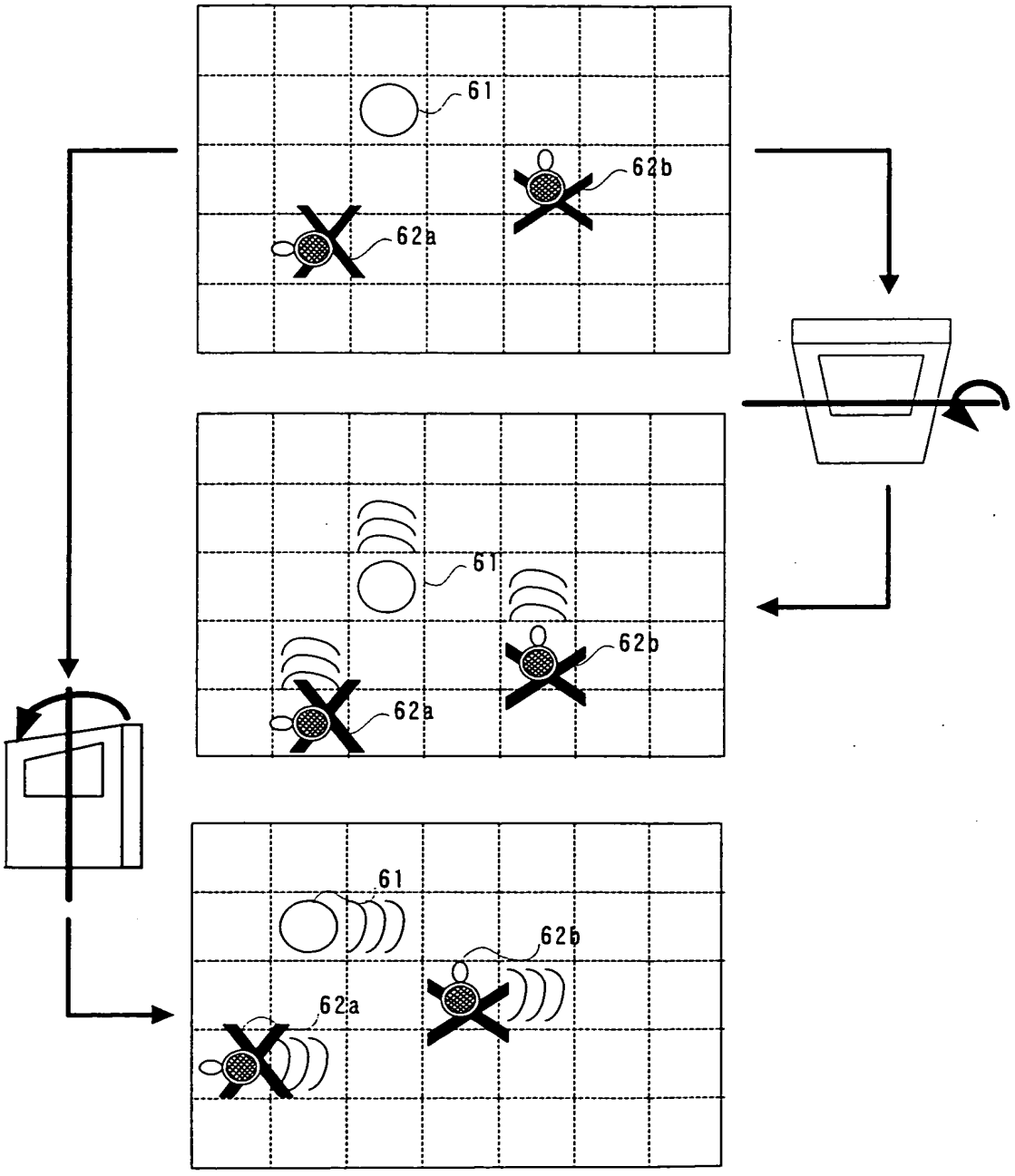


FIG. 15

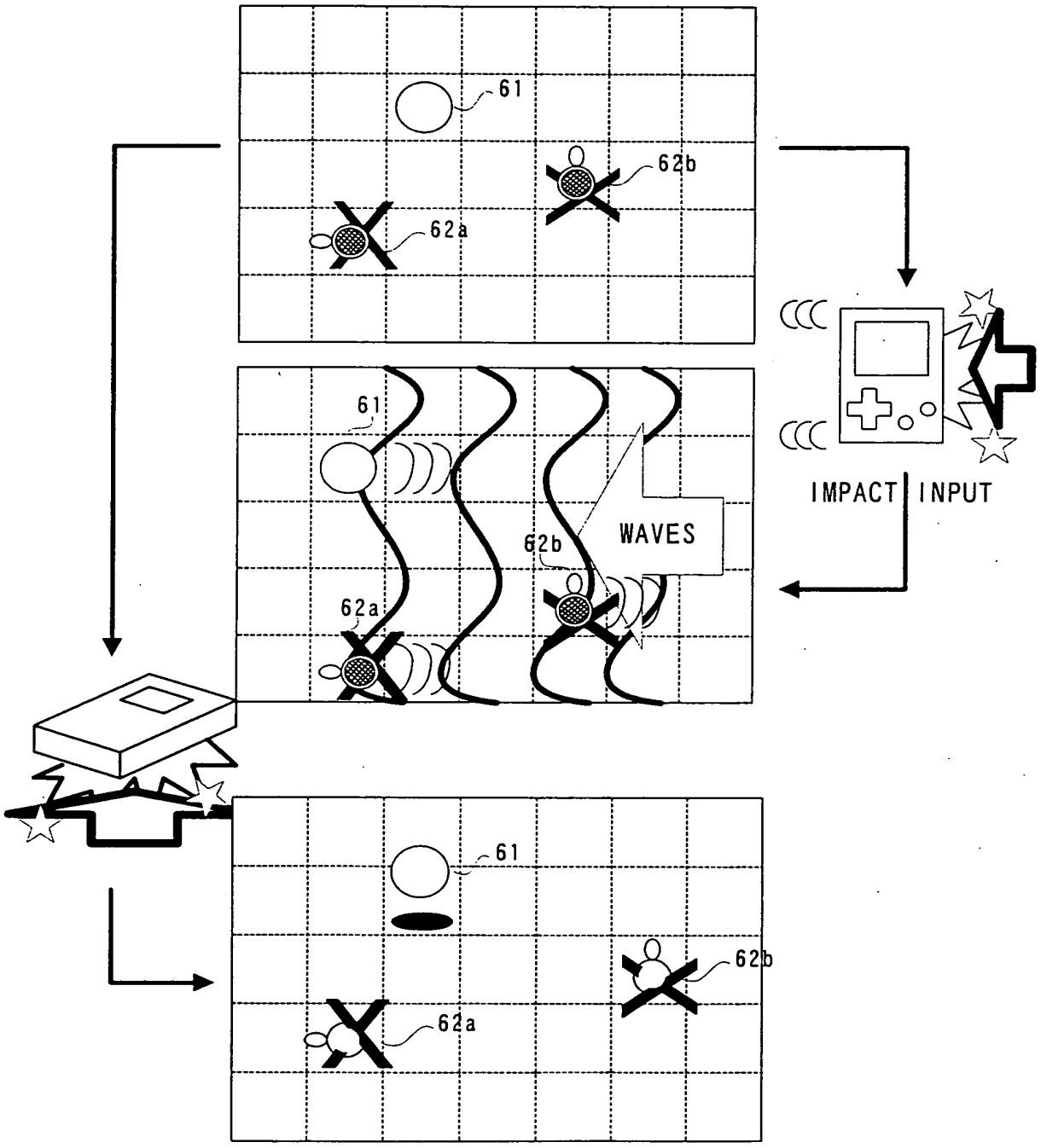


FIG. 16

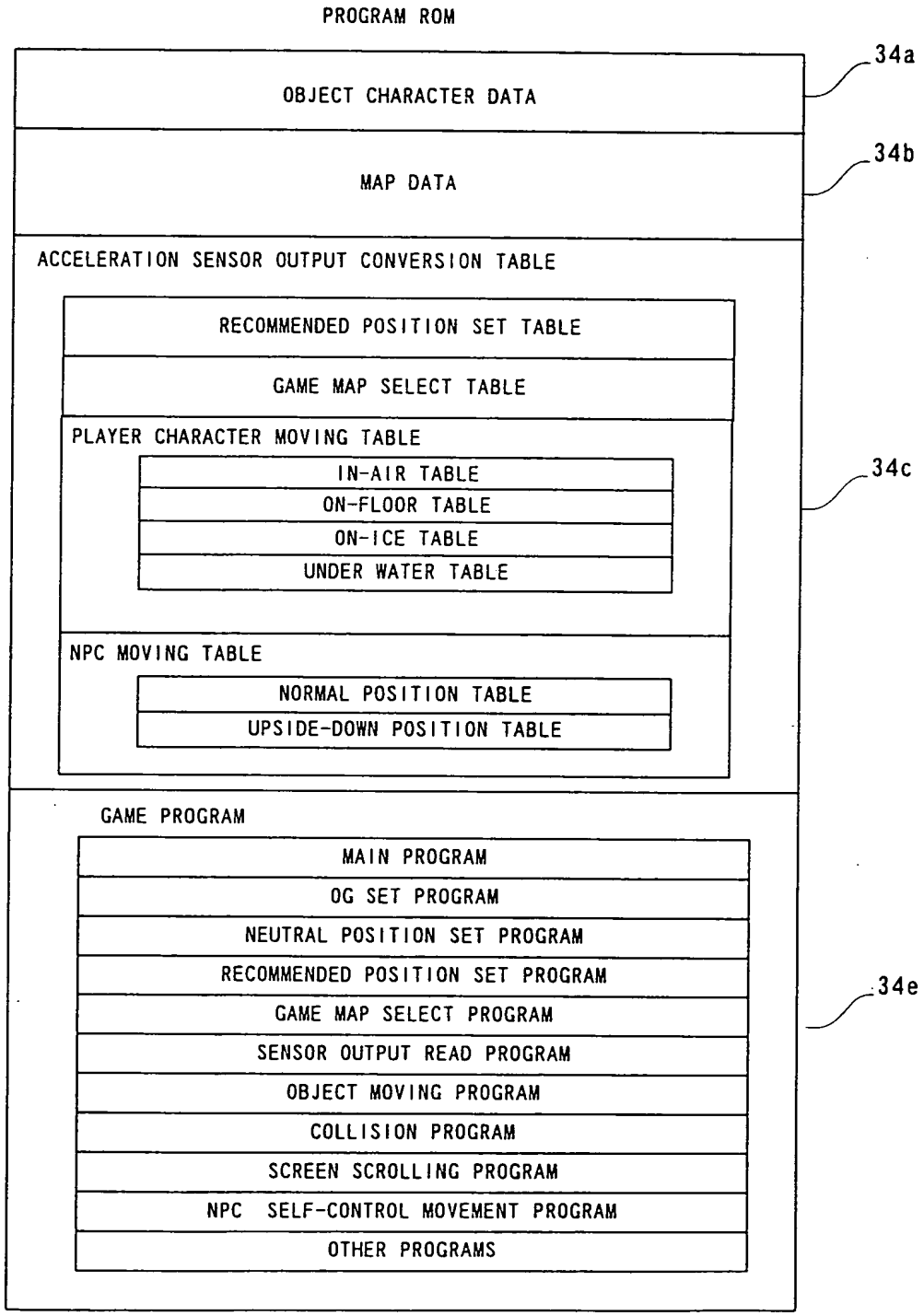

PROGRAM ROM
OBJECT CHARACTER DATA
34a
MAP DATA
34b
ACCELERATION SENSOR OUTPUT CONVERSION TABLE
RECOMMENDED POSITION SET TABLE
GAME MAP SELECT TABLE
PLAYER CHARACTER MOVING TABLE
IN-AIR TABLE
ON-FLOOR TABLE
ON-ICE TABLE
UNDER WATER TABLE
NPC MOVING TABLE
NORMAL POSITION TABLE
UPSIDE-DOWN POSITION TABLE
34c
GAME PROGRAM
MAIN PROGRAM
OG SET PROGRAM
NEUTRAL POSITION SET PROGRAM
RECOMMENDED POSITION SET PROGRAM
GAME MAP SELECT PROGRAM
SENSOR OUTPUT READ PROGRAM
OBJECT MOVING PROGRAM
COLLISION PROGRAM
SCREEN SCROLLING PROGRAM
NPC SELF-CONTROL MOVEMENT PROGRAM
OTHER PROGRAMS
34e

FIG. 17

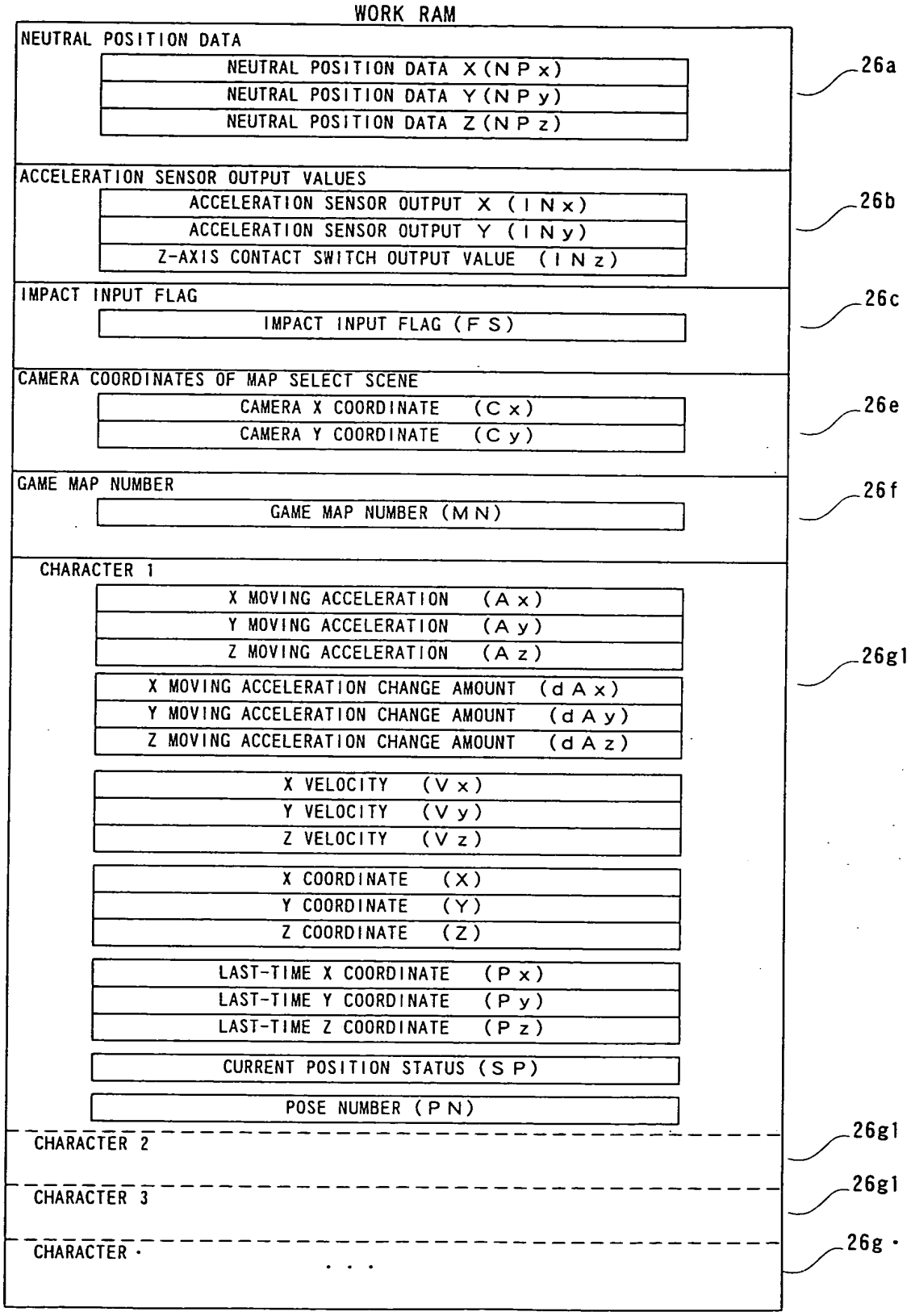

WORK RAM
NEUTRAL POSITION DATA
NEUTRAL POSITION DATA X (N P x)
NEUTRAL POSITION DATA Y (N P y)
NEUTRAL POSITION DATA Z (N P z)
26a
ACCELERATION SENSOR OUTPUT VALUES
ACCELERATION SENSOR OUTPUT X (I N x)
ACCELERATION SENSOR OUTPUT Y (I N y)
Z-AXIS CONTACT SWITCH OUTPUT VALUE (I N z)
26b
IMPACT INPUT FLAG
IMPACT INPUT FLAG (F S)
26c
CAMERA COORDINATES OF MAP SELECT SCENE
CAMERA X COORDINATE (C x)
CAMERA Y COORDINATE (C y)
26e
GAME MAP NUMBER
GAME MAP NUMBER (M N)
26f
CHARACTER 1
X MOVING ACCELERATION (A x)
Y MOVING ACCELERATION (A y)
Z MOVING ACCELERATION (A z)
X MOVING ACCELERATION CHANGE AMOUNT (d A x)
Y MOVING ACCELERATION CHANGE AMOUNT (d A y)
Z MOVING ACCELERATION CHANGE AMOUNT (d A z)
X VELOCITY (V x)
Y VELOCITY (V y)
Z VELOCITY (V z)
X COORDINATE (X)
Y COORDINATE (Y)
Z COORDINATE (Z)
LAST-TIME X COORDINATE (P x)
LAST-TIME Y COORDINATE (P y)
LAST-TIME Z COORDINATE (P z)
CURRENT POSITION STATUS (S P)
POSE NUMBER (P N)
26g1
CHARACTER 2
26g1
CHARACTER 3
26g1
CHARACTER ·
· · ·
26g ·

FIG. 18

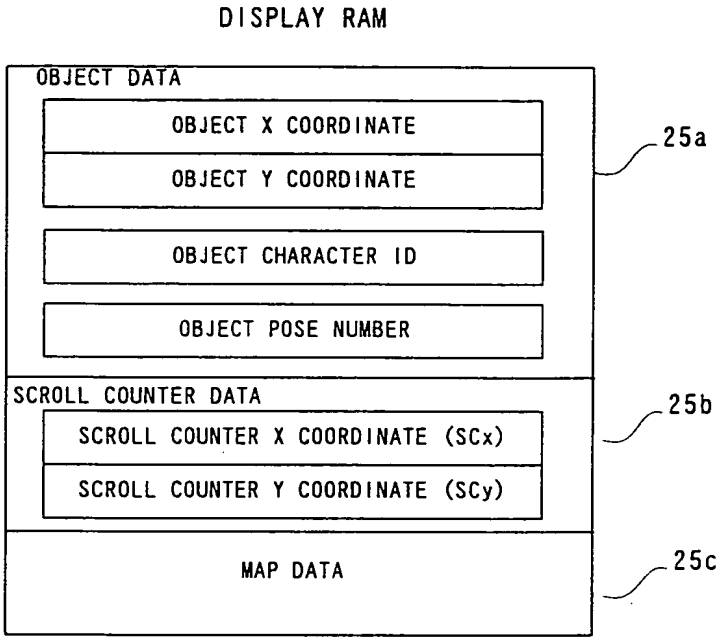

DISPLAY RAM
OBJECT DATA
OBJECT X COORDINATE
OBJECT Y COORDINATE
OBJECT CHARACTER ID
OBJECT POSE NUMBER
25a
SCROLL COUNTER DATA
SCROLL COUNTER X COORDINATE (SCx)
SCROLL COUNTER Y COORDINATE (SCy)
25b
MAP DATA
25c

FIG. 19

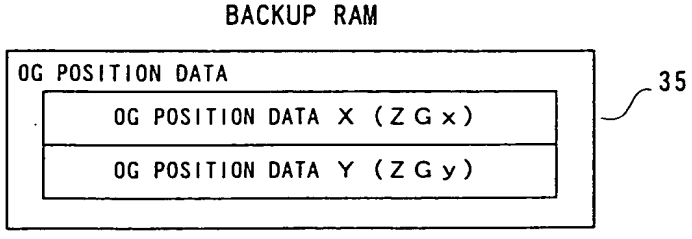

BACKUP RAM
OG POSITION DATA
OG POSITION DATA X (ZGx)
OG POSITION DATA Y (ZGy)
35

FIG. 20

GAME MAP SELECT PROCESSING TABLE

	UTILIZATION METHOD	CORRECTION RATIO	PATICULAR CORRECTION CONDITION 1	PATICULAR CORRECTION NUMBER 1	PATICULAR CORRECTION CONDITION 2	PATICULAR CORRECTION NUMBER 2
SENSOR OUTOUT VALUE X(INx)	CHANGE AMOUNT OF CAMERA X COORDINATE (Cx)	× 2	—	—	—	—
SENSOR OUTPUT VALUE Y(INy)	CHANGE AOUNT OF CAMERA Y COORDINATE (Cy)	× 2	—	—	—	—
Z-AXIS CONTACT SW OUTPUT VALUE (INz)	MAP DECISION	—	—	—	—	—
INPACT INPUT FLAG (FS)	—	—	—	—	—	—

FIG. 21

PLAYER CHARACTER MOVING TABLE (IN-AIR)

	UTILIZATION METHOD	CORRECTION RATIO	PATICULAR CORRECTION CONDITION 1	PATICULAT CORRECTION NUMBER 1	PATICULAR CORRECTION CONDITION 2	PATICULAR CORRECTION NUMBER 2
SENSOR OUTOUT VALUE X(INx)	—	—	—	—	—	—
SENSOR OUTPUT VALUE Y(INy)	—	—	—	—	—	—
Z-AXIS CONTACT SW OUTPUT VALUE (INz)	CHANGE AMOUNT OF Z MOVING ACCELERATION (dAz)	× 1	—	—	—	—
INPACT INPUT FLAG (FS)	—	—	—	—	—	—

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FIG. 22

PLAYER CHARACTER MOVING TABLE (ON-FLOOR)

	UTILIZATION METHOD	CORRECTION RATIO	PATICULAR CORRECTION CONDITION 1	PATICULAR CORRECTION NUMBER 1	PATICULAR CORRECTION CONDITION 2	PATICULAR CORRECTION NUMBER 2
SENSOR OUTOUT VALUE X(INx)	CHANGE AMOUNT OF X MOVING ACCELERATION (dAx)	× 2	Inx>20	40	—	—
SENSOR OUTPUT VALUE Y(INy)	CHANGE AOUNT OF Y MOVING ACCELERATION (dAy)	× 2	Iny>20	40	—	—
Z-AXIS CONTACT SW OUTPUT VALUE (INz)	CHANGE AMOUNT OF Z MOVING ACCELERATION (dAz)	× 1	—	—	—	—
INPACT INPUT FLAG (FS)	CHANGE AMOUNT OF XY MOVING ACCELERATION (dAx, dAy)	× 3	—	—	—	—

FIG. 23

PLAYER CHARACTER MOVING TABLE (ON-ICE)

	UTILIZATION METHOD	CORRECTION RATIO	PATICULAR CORRECTION CONDITION 1	PATICULAT CORRECTION NUMBER 1	PATICULAR CORRECTION CONDITION 2	PATICULAR CORRECTION NUMBER 2
SENSOR OUTOUT VALUE X(INx)	CHANGE AMOUNT OF X MOVING ACCELERATION (dAx)	× 3	Inx>20	60	—	—
SENSOR OUTPUT VALUE Y(INy)	CHANGE AOUNT OF Y MOVING ACCELERATION (dAy)	× 3	Iny>20	60	—	—
Z-AXIS CONTACT SW OUTPUT VALUE (INz)	CHANGE AMOUNT OF Z MOVING ACCELERATION (dAz)	× 1	—	—	—	—
INPACT INPUT FLAG (FS)	CHANGE AMOUNT OF Z MOVING ACCELERATION (dAz)	× 5	—	—	—	—

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FIG. 24

PLAYER CHARACTER MOVING TABLE (UNDER-WATER)

	UTILIZATION METHOD	CORRECTION RATIO	PATICULAR CORRECTION CONDITION 1	PATICULAR CORRECTION NUMBER 1	PATICULAR CORRECTION CONDITION 2	PATICULAR CORRECTION NUMBER 2
SENSOR OUTOUT VALUE X(INx)	CHANGE AMOUNT OF X MOVING ACCELERATION (dAx)	× 1 / 2	Inx>20	60	—	—
SENSOR OUTPUT VALUE Y(INy)	CHANGE AOUNT OF Y MOVING ACCELERATION (dAy)	× 1 / 2	Iny>20	60	—	—
Z-AXIS CONTACT SW OUTPUT VALUE (INz)	CHANGE AMOUNT OF Z MOVING ACCELERATION (dAz)	× 1	—	—	—	—
INPACT INPUT FLAG (FS)	—	—	—	—	—	—

FIG. 25

NPC MOVING TABLE (FOR TORTOISE NORMAL POSITION)

	UTILIZATION METHOD	CORRECTION RATIO	PATICULAR CORRECTION CONDITION 1	PATICULAT CORRECTION NUMBER 1	PATICULAR CORRECTION CONDITION 2	PATICULAR CORRECTION NUMBER 2
SENSOR OUTOUT VALUE X(INx)	CHANGE AMOUNT OF X MOVING ACCELERATION (dAx)	× 1 / 2	Inx<10	0	Inx>20	10
SENSOR OUTPUT VALUE Y(INy)	CHANGE AOUNT OF Y MOVING ACCELERATION (dAy)	× 1 / 2	Iny<10	0	Iny>20	10
Z-AXIS CONTACT SW OUTPUT VALUE (INz)	POSITION INVERSION	—	—	—	—	—
INPACT INPUT FLAG (FS)	—	—	—	—	—	—

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FIG. 26

NPC MOVING TABLE (FOR TORTOISE UPSIDE-DOWN POSITION)

	UTILIZATION METHOD	CORRECTION RATIO	PATICULAR CORRECTION CONDITION 1	PATICULAT CORRECTION NUMBER 1	PATICULAR CORRECTION CONDITION 2	PATICULAR CORRECTION NUMBER 2
SENSOR OUTOUT VALUE X(INx)	CHANGE AMOUNT OF X MOVING ACCELERATION (dAx)	× 2	Inx>20	40	—	
SENSOR OUTPUT VALUE Y(INy)	CHANGE AOUNT OF Y MOVING ACCELERATION (dAy)	× 1	Iny>20	40	—	—
Z-AXIS CONTACT SW OUTPUT VALUE (INz)	POSITION INVERSION	—	—	—	—	—
INPACT INPUT FLAG (FS)	—	—	—	—	—	—

FIG. 27

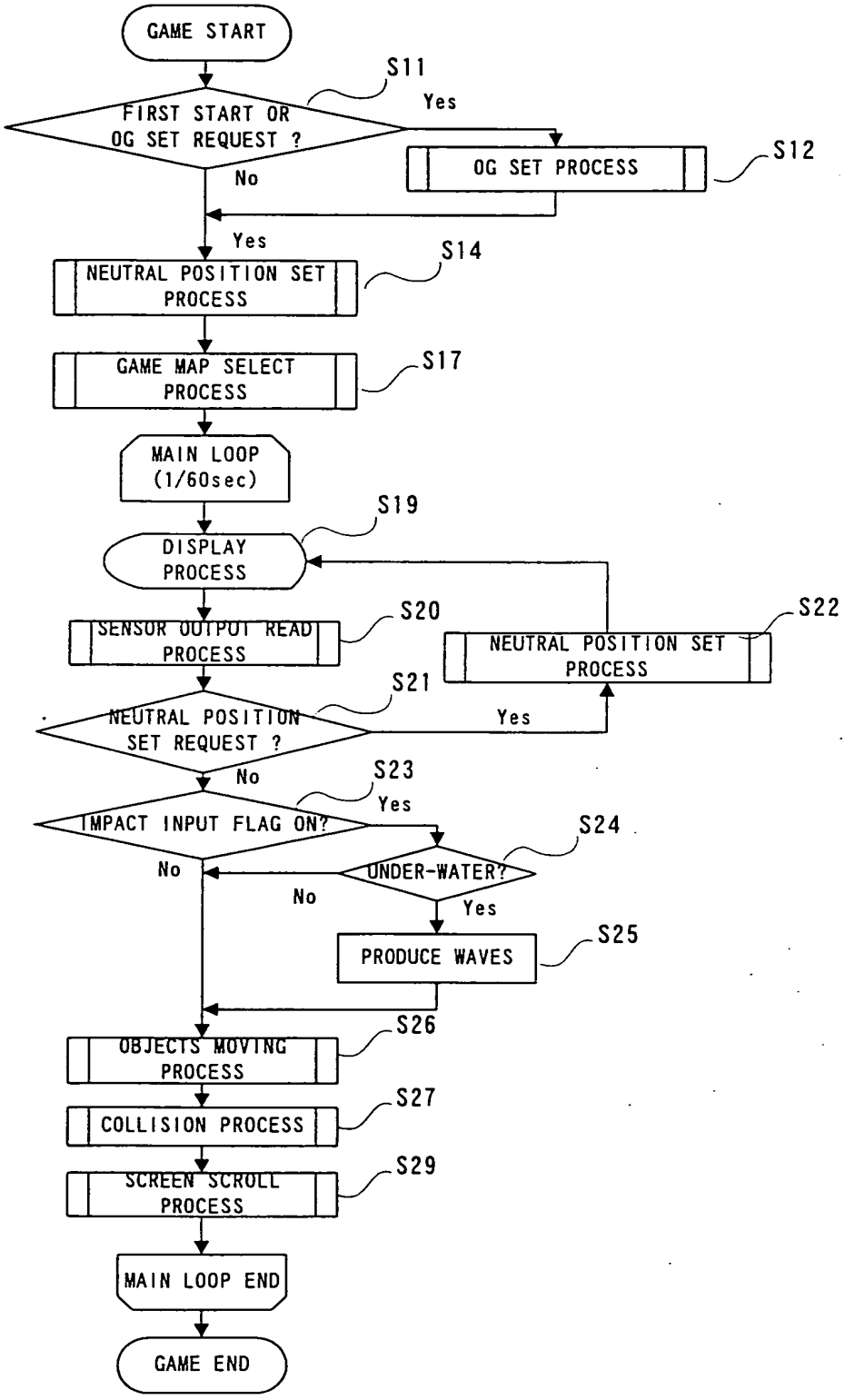
GAME START
S11
FIRST START OR OG SET REQUEST ?
Yes
No
OG SET PROCESS
S12
Yes
NEUTRAL POSITION SET PROCESS
S14
GAME MAP SELECT PROCESS
S17
MAIN LOOP (1/60sec)
S19
DISPLAY PROCESS
S20
SENSOR OUTPUT READ PROCESS
S22
NEUTRAL POSITION SET PROCESS
S21
NEUTRAL POSITION SET REQUEST ?
Yes
No
S23
IMPACT INPUT FLAG ON?
Yes
No
S24
UNDER-WATER?
No
Yes
PRODUCE WAVES
S25
S26
OBJECTS MOVING PROCESS
S27
COLLISION PROCESS
S29
SCREEN SCROLL PROCESS
MAIN LOOP END
GAME END

FIG. 28

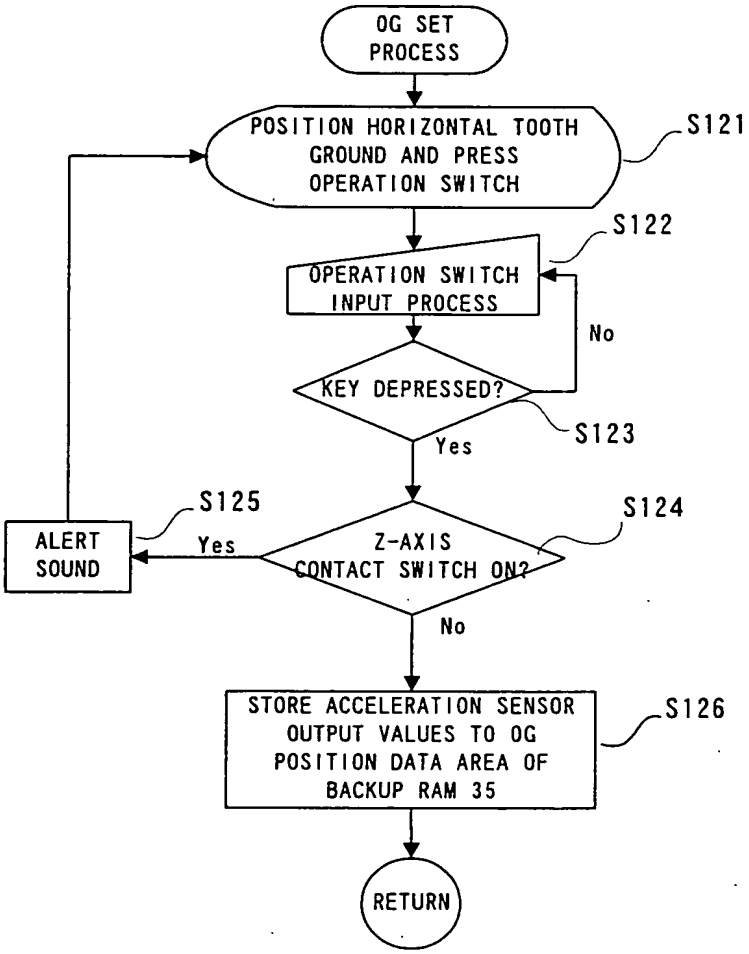
OG SET PROCESS
POSITION HORIZONTAL TOOTH GROUND AND PRESS OPERATION SWITCH
S121
OPERATION SWITCH INPUT PROCESS
S122
No
KEY DEPRESSED?
S123
Yes
Z-AXIS CONTACT SWITCH ON?
S124
Yes
ALERT SOUND
S125
No
STORE ACCELERATION SENSOR OUTPUT VALUES TO OG POSITION DATA AREA OF BACKUP RAM 35
S126
RETURN

FIG. 29

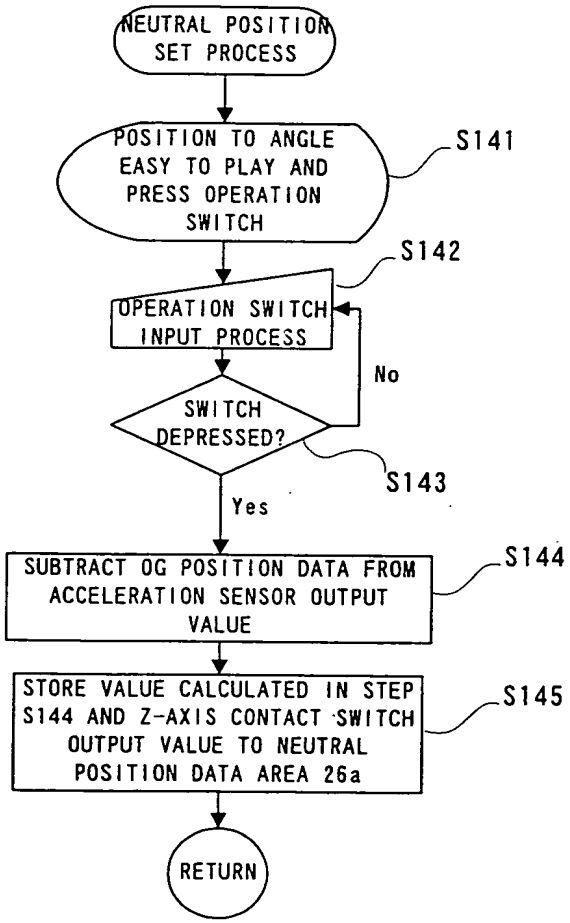
NEUTRAL POSITION SET PROCESS
POSITION TO ANGLE EASY TO PLAY AND PRESS OPERATION SWITCH
S141
S142
OPERATION SWITCH INPUT PROCESS
No
SWITCH DEPRESSED?
S143
Yes
SUBTRACT OG POSITION DATA FROM ACCELERATION SENSOR OUTPUT VALUE
S144
STORE VALUE CALCULATED IN STEP S144 AND Z-AXIS CONTACT SWITCH OUTPUT VALUE TO NEUTRAL POSITION DATA AREA 26a
S145
RETURN

FIG. 30

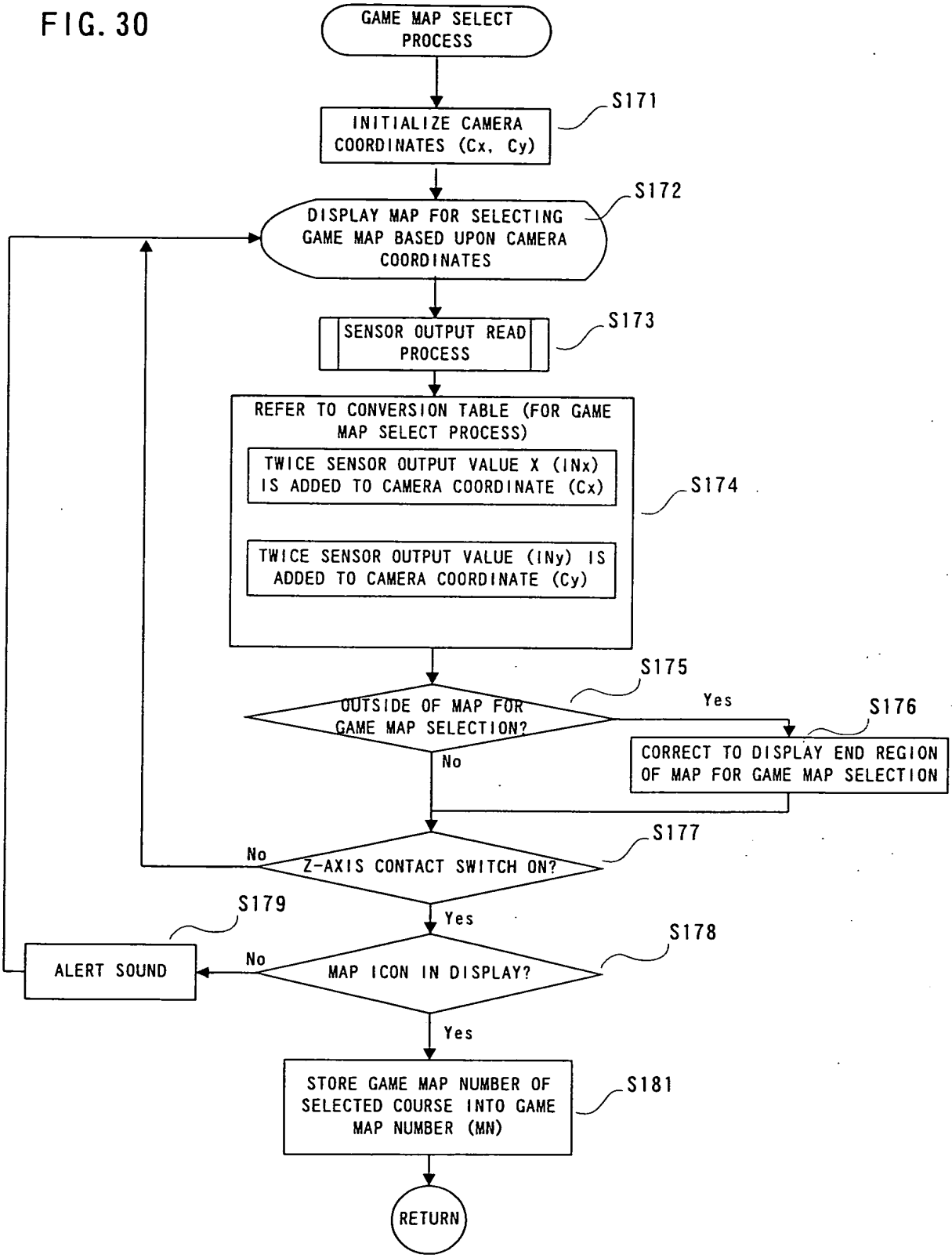
GAME MAP SELECT PROCESS
INITIALIZE CAMERA COORDINATES (Cx, Cy)
S171
DISPLAY MAP FOR SELECTING GAME MAP BASED UPON CAMERA COORDINATES
S172
SENSOR OUTPUT READ PROCESS
S173
REFER TO CONVERSION TABLE (FOR GAME MAP SELECT PROCESS)
TWICE SENSOR OUTPUT VALUE X (INx) IS ADDED TO CAMERA COORDINATE (Cx)
TWICE SENSOR OUTPUT VALUE (INy) IS ADDED TO CAMERA COORDINATE (Cy)
S174
OUTSIDE OF MAP FOR GAME MAP SELECTION?
S175
Yes
S176
CORRECT TO DISPLAY END REGION OF MAP FOR GAME MAP SELECTION
No
Z-AXIS CONTACT SWITCH ON?
S177
No
Yes
MAP ICON IN DISPLAY?
S178
No
ALERT SOUND
S179
Yes
STORE GAME MAP NUMBER OF SELECTED COURSE INTO GAME MAP NUMBER (MN)
S181
RETURN

FIG. 31

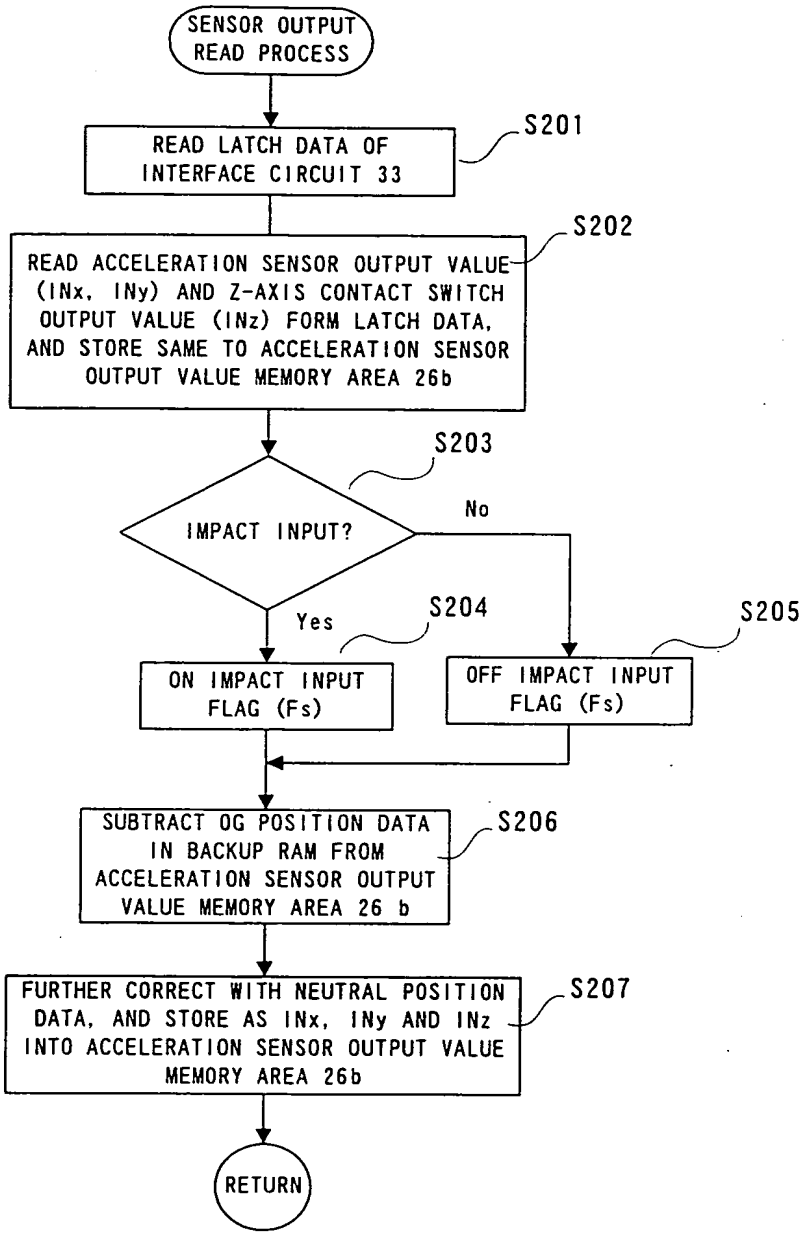
SENSOR OUTPUT READ PROCESS
READ LATCH DATA OF INTERFACE CIRCUIT 33
S201
READ ACCELERATION SENSOR OUTPUT VALUE (INx, INy) AND Z-AXIS CONTACT SWITCH OUTPUT VALUE (INz) FORM LATCH DATA, AND STORE SAME TO ACCELERATION SENSOR OUTPUT VALUE MEMORY AREA 26b
S202
IMPACT INPUT?
S203
No
Yes
S204
ON IMPACT INPUT FLAG (Fs)
S205
OFF IMPACT INPUT FLAG (Fs)
SUBTRACT OG POSITION DATA IN BACKUP RAM FROM ACCELERATION SENSOR OUTPUT VALUE MEMORY AREA 26 b
S206
FURTHER CORRECT WITH NEUTRAL POSITION DATA, AND STORE AS INx, INy AND INz INTO ACCELERATION SENSOR OUTPUT VALUE MEMORY AREA 26b
S207
RETURN

FIG. 32

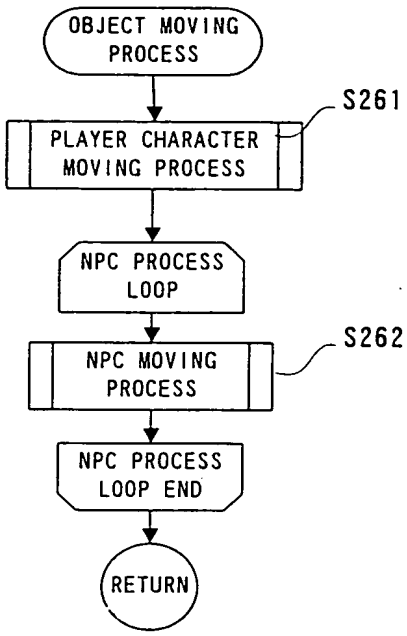
OBJECT MOVING PROCESS
PLAYER CHARACTER MOVING PROCESS
S261
NPC PROCESS LOOP
NPC MOVING PROCESS
S262
NPC PROCESS LOOP END
RETURN

FIG. 33

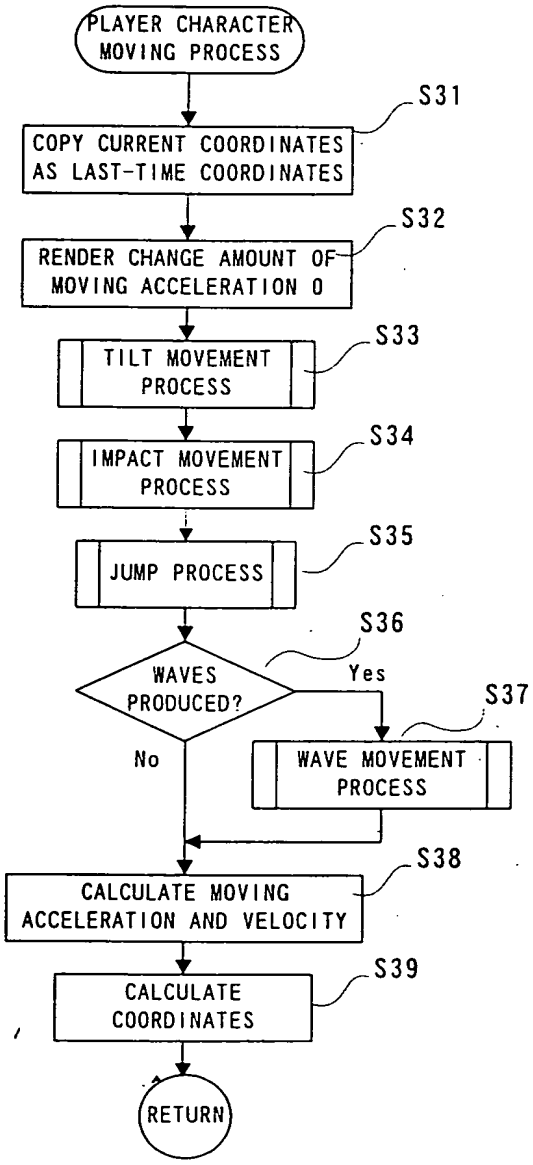
PLAYER CHARACTER MOVING PROCESS
S31
COPY CURRENT COORDINATES AS LAST-TIME COORDINATES
S32
RENDER CHANGE AMOUNT OF MOVING ACCELERATION 0
S33
TILT MOVEMENT PROCESS
S34
IMPACT MOVEMENT PROCESS
S35
JUMP PROCESS
S36
WAVES PRODUCED?
Yes
No
S37
WAVE MOVEMENT PROCESS
S38
CALCULATE MOVING ACCELERATION AND VELOCITY
S39
CALCULATE COORDINATES
RETURN

FIG. 34

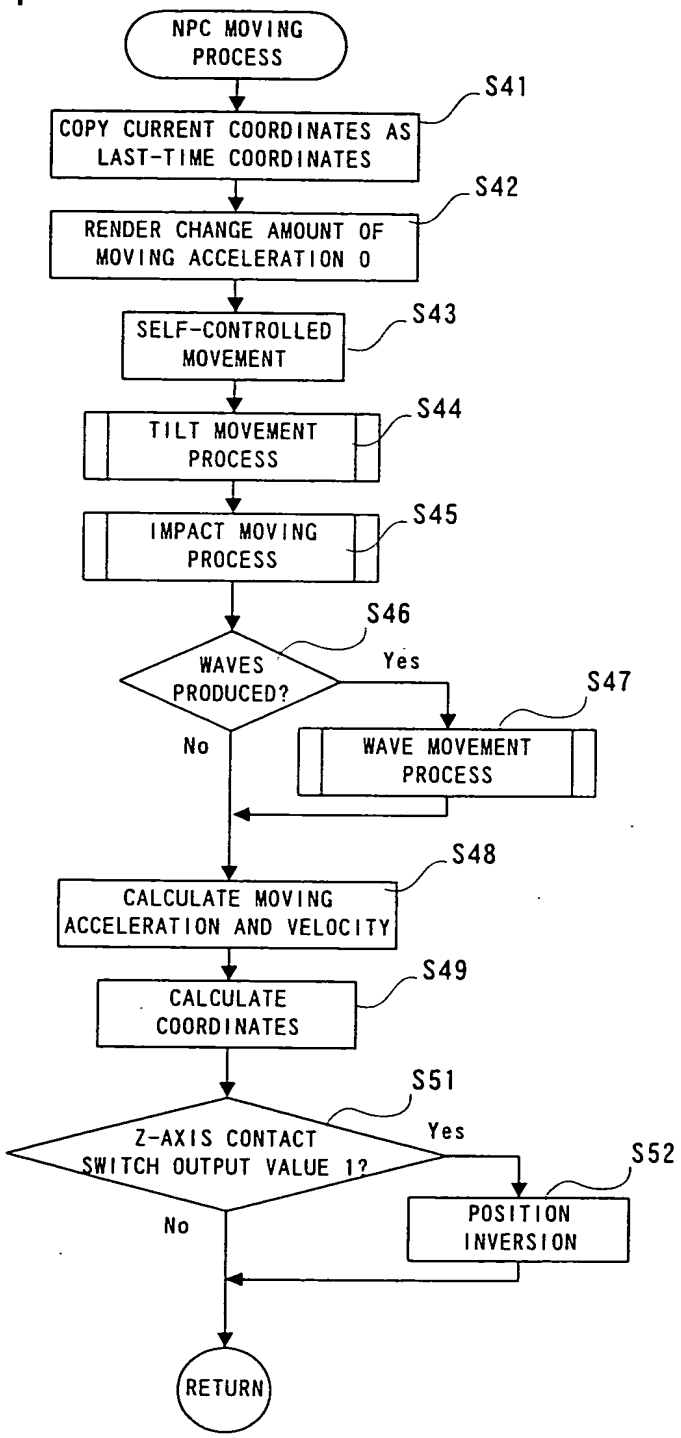
NPC MOVING PROCESS
S41
COPY CURRENT COORDINATES AS LAST-TIME COORDINATES
S42
RENDER CHANGE AMOUNT OF MOVING ACCELERATION 0
S43
SELF-CONTROLLED MOVEMENT
S44
TILT MOVEMENT PROCESS
S45
IMPACT MOVING PROCESS
S46
WAVES PRODUCED?
Yes
No
S47
WAVE MOVEMENT PROCESS
S48
CALCULATE MOVING ACCELERATION AND VELOCITY
S49
CALCULATE COORDINATES
S51
Z-AXIS CONTACT SWITCH OUTPUT VALUE 1?
Yes
No
S52
POSITION INVERSION
RETURN

FIG. 35

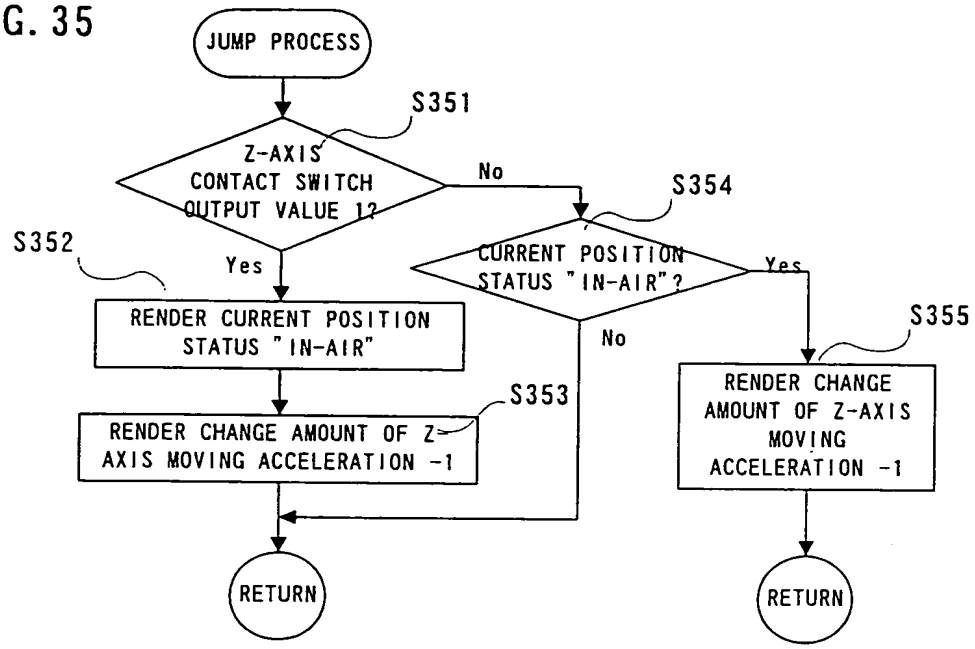
JUMP PROCESS
S351
Z-AXIS CONTACT SWITCH OUTPUT VALUE 1?
No
S354
CURRENT POSITION STATUS "IN-AIR"?
Yes
S352
Yes
RENDER CURRENT POSITION STATUS "IN-AIR"
No
S355
RENDER CHANGE AMOUNT OF Z-AXIS MOVING ACCELERATION -1
S353
RENDER CHANGE AMOUNT OF Z-AXIS MOVING ACCELERATION -1
RETURN
RETURN

FIG. 36

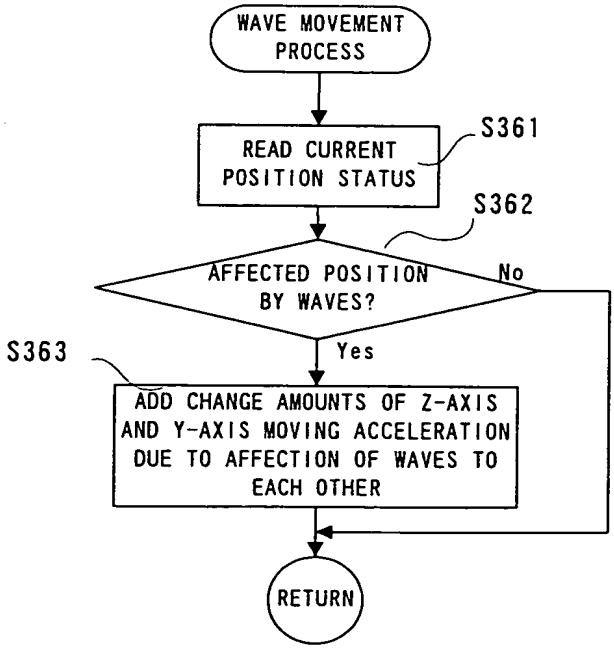
WAVE MOVEMENT PROCESS
READ CURRENT POSITION STATUS
S361
S362
AFFECTED POSITION BY WAVES?
No
Yes
S363
ADD CHANGE AMOUNTS OF Z-AXIS AND Y-AXIS MOVING ACCELERATION DUE TO AFFECTION OF WAVES TO EACH OTHER
RETURN

FIG. 37

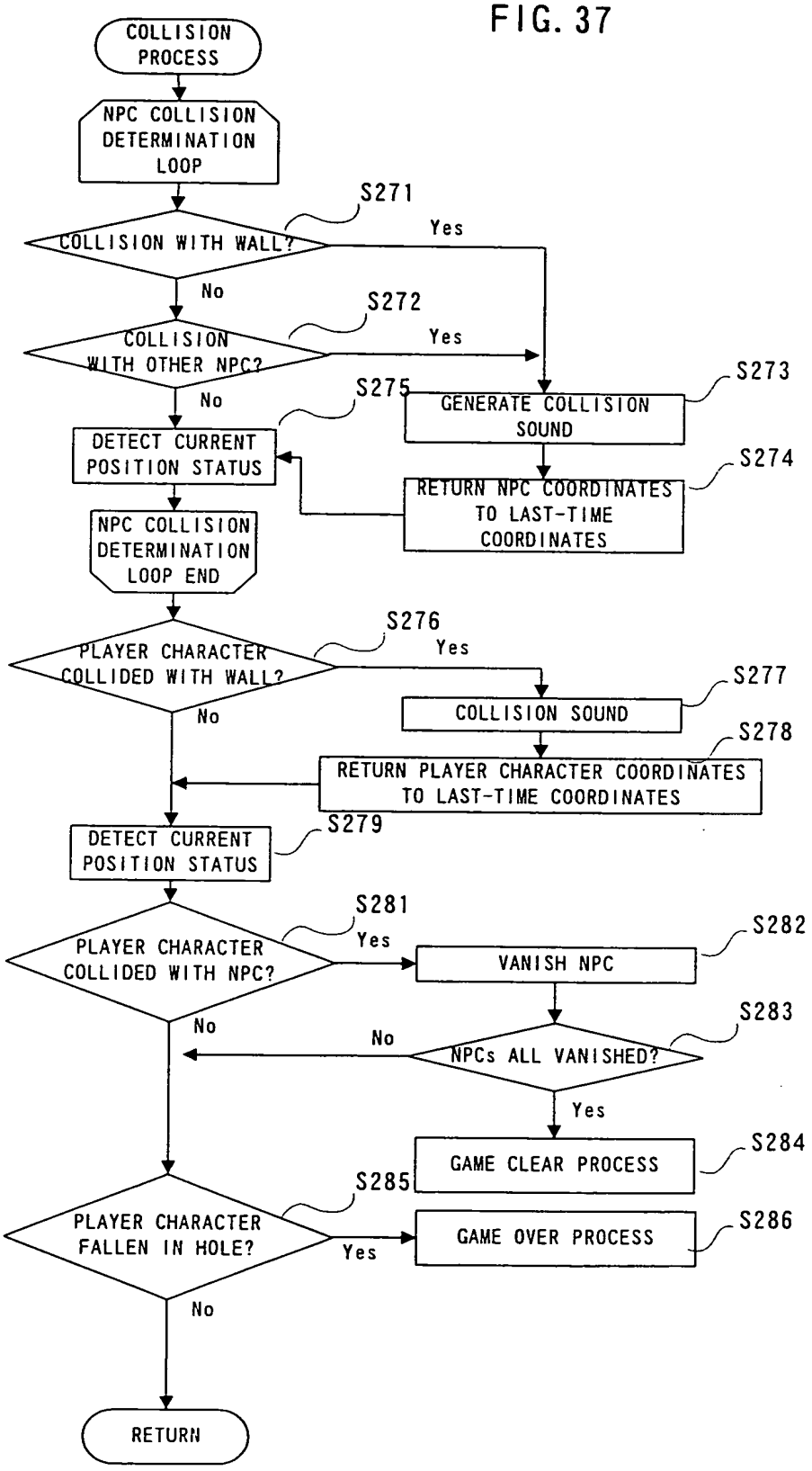
COLLISION PROCESS
NPC COLLISION DETERMINATION LOOP
S271
COLLISION WITH WALL?
Yes
No
S272
COLLISION WITH OTHER NPC?
Yes
No
S273
GENERATE COLLISION SOUND
S275
DETECT CURRENT POSITION STATUS
S274
RETURN NPC COORDINATES TO LAST-TIME COORDINATES
NPC COLLISION DETERMINATION LOOP END
S276
PLAYER CHARACTER COLLIDED WITH WALL?
Yes
No
S277
COLLISION SOUND
S278
RETURN PLAYER CHARACTER COORDINATES TO LAST-TIME COORDINATES
S279
DETECT CURRENT POSITION STATUS
S281
PLAYER CHARACTER COLLIDED WITH NPC?
Yes
No
S282
VANISH NPC
S283
NPCs ALL VANISHED?
No
Yes
S284
GAME CLEAR PROCESS
S285
PLAYER CHARACTER FALLEN IN HOLE?
Yes
No
S286
GAME OVER PROCESS
RETURN

FIG. 38

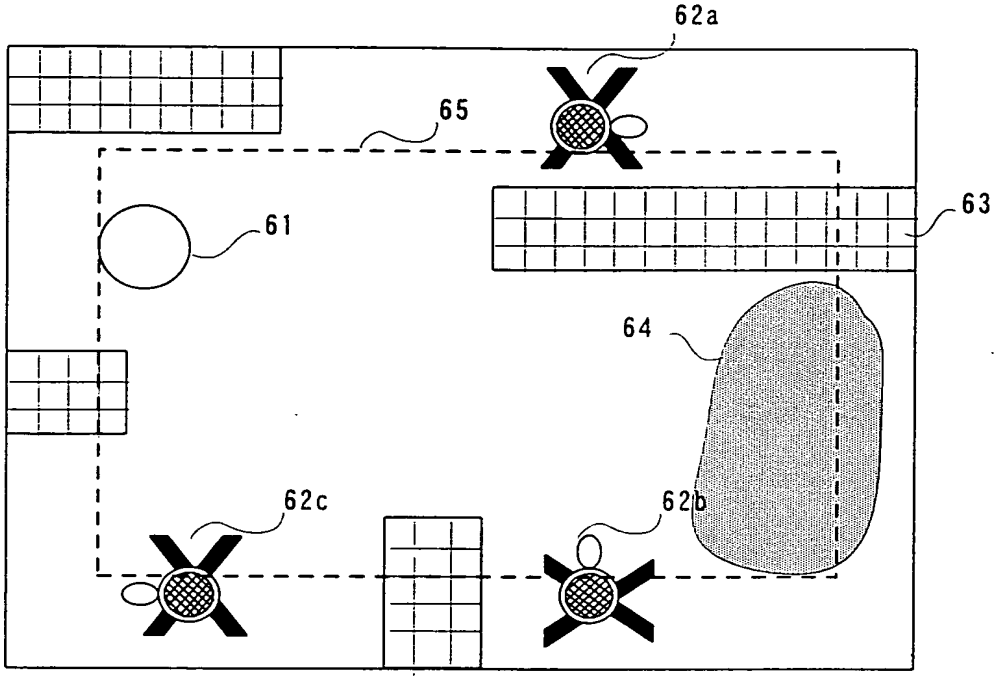

FIG. 39

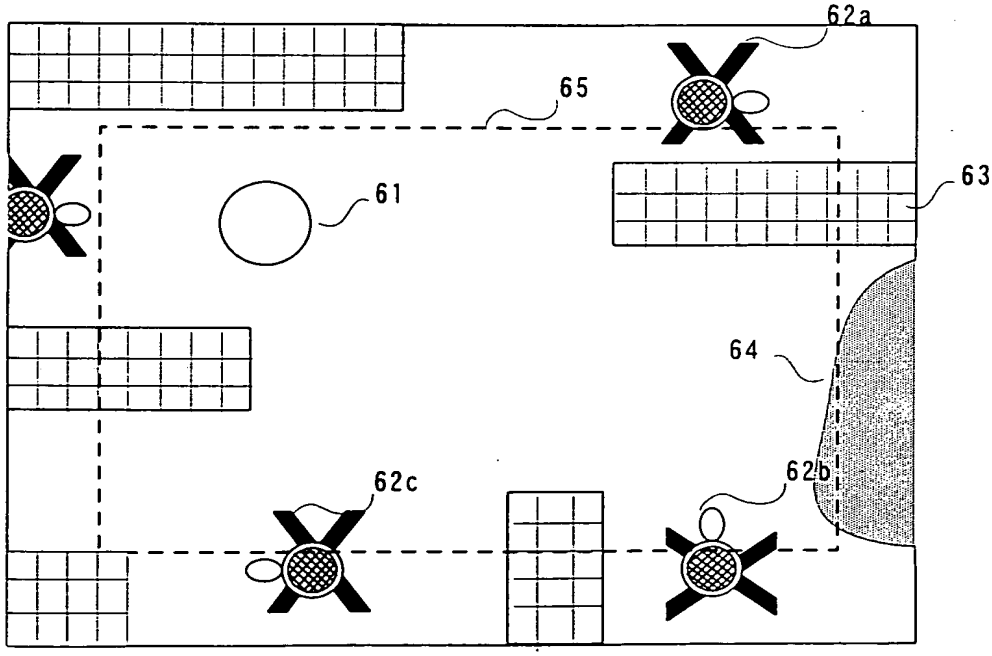

FIG. 40

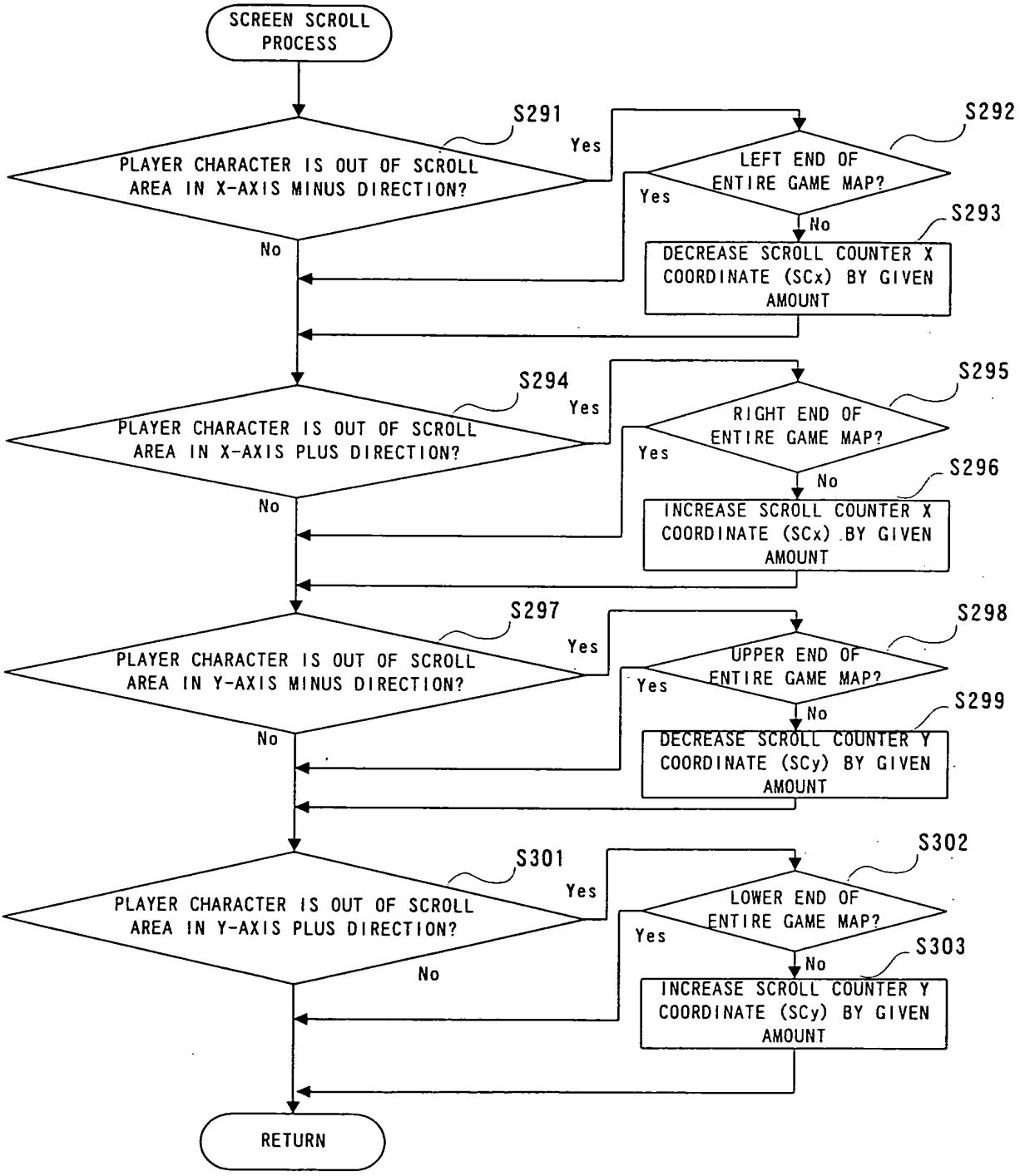

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FIG. 41

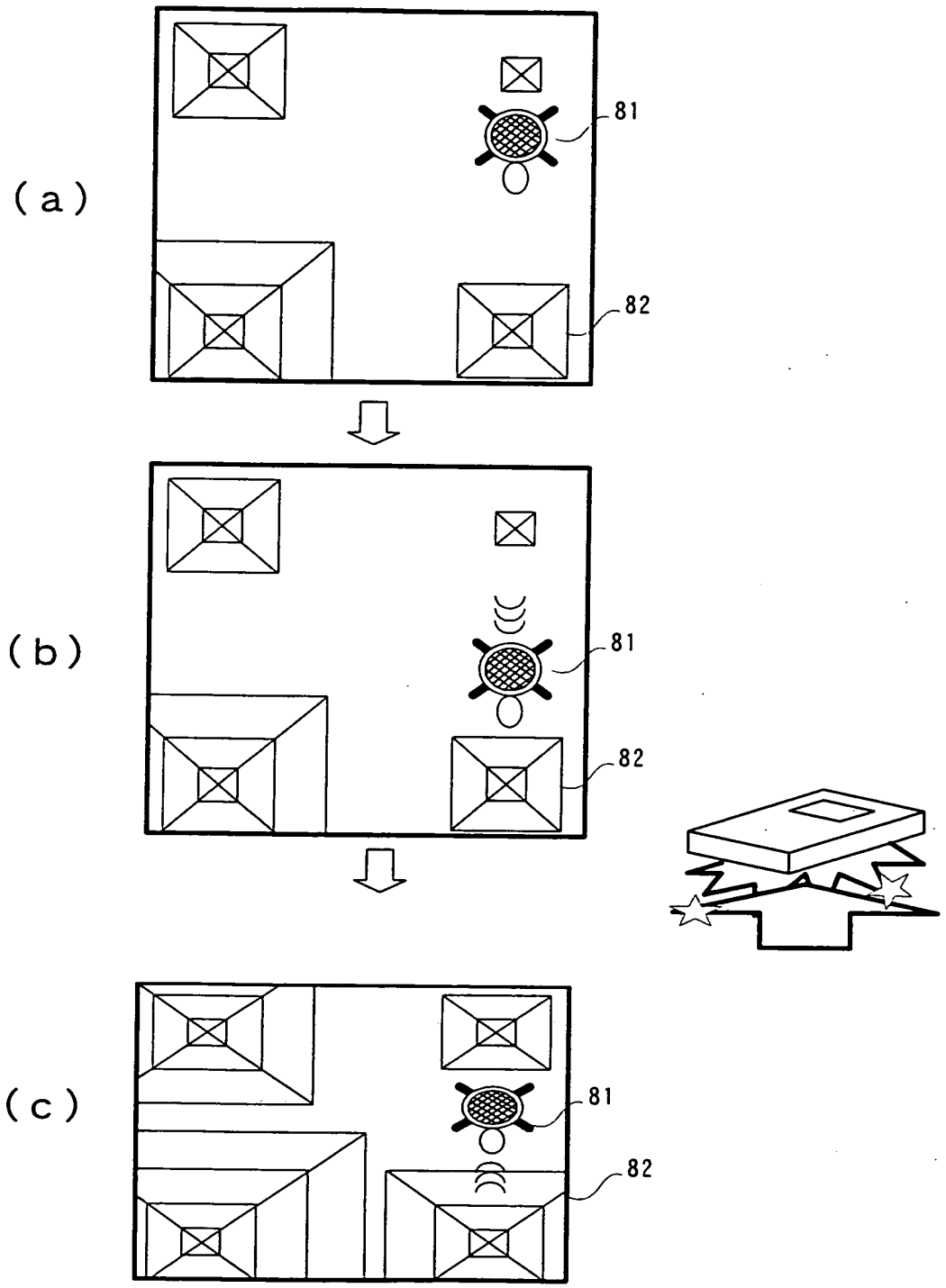

FIG. 42

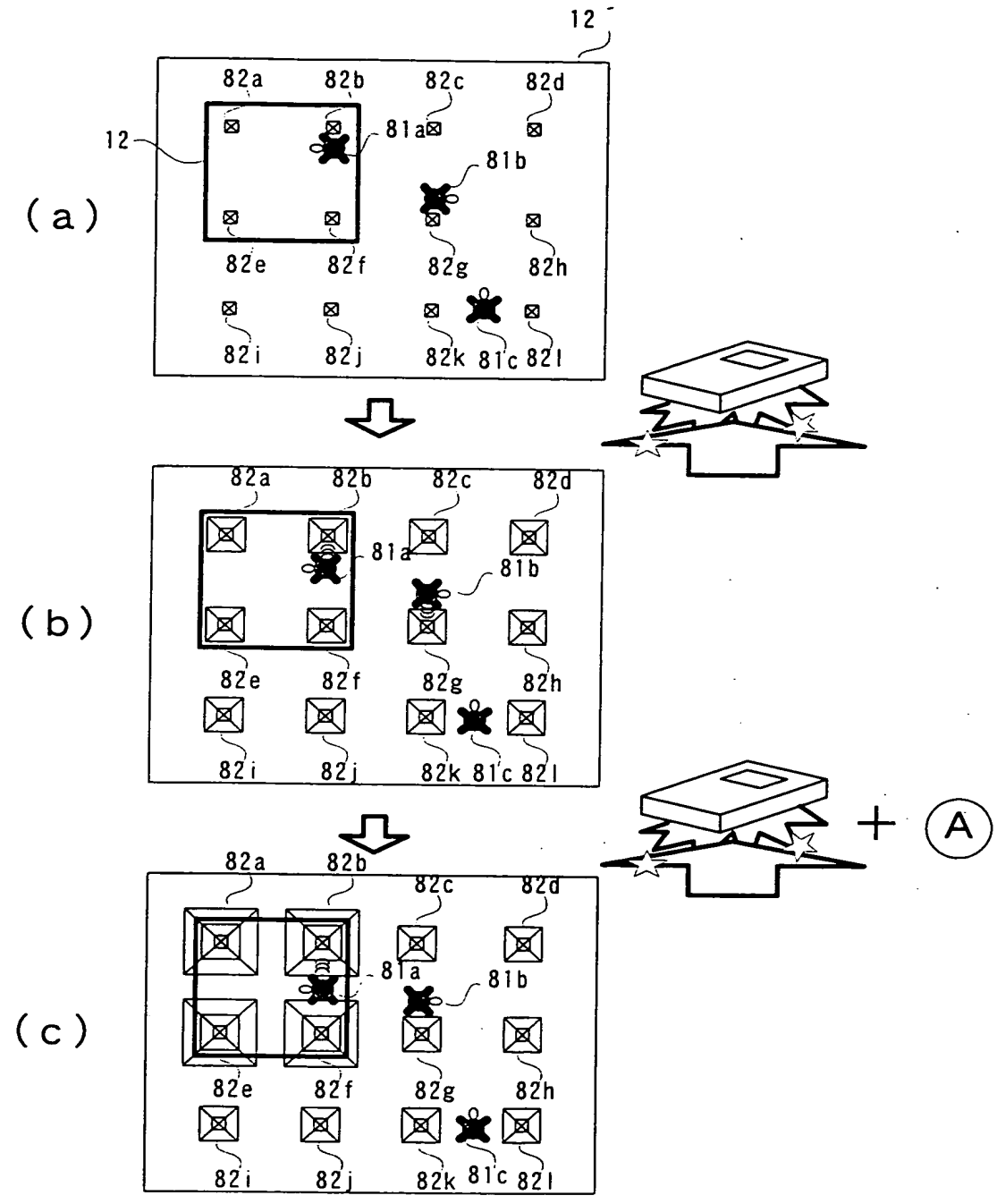
(a)
(b)
(c)
12
82a
82b
82c
82d
81a
81b
82e
82f
82g
82h
82i
82j
82k
81c
82l
+
A

FIG. 43

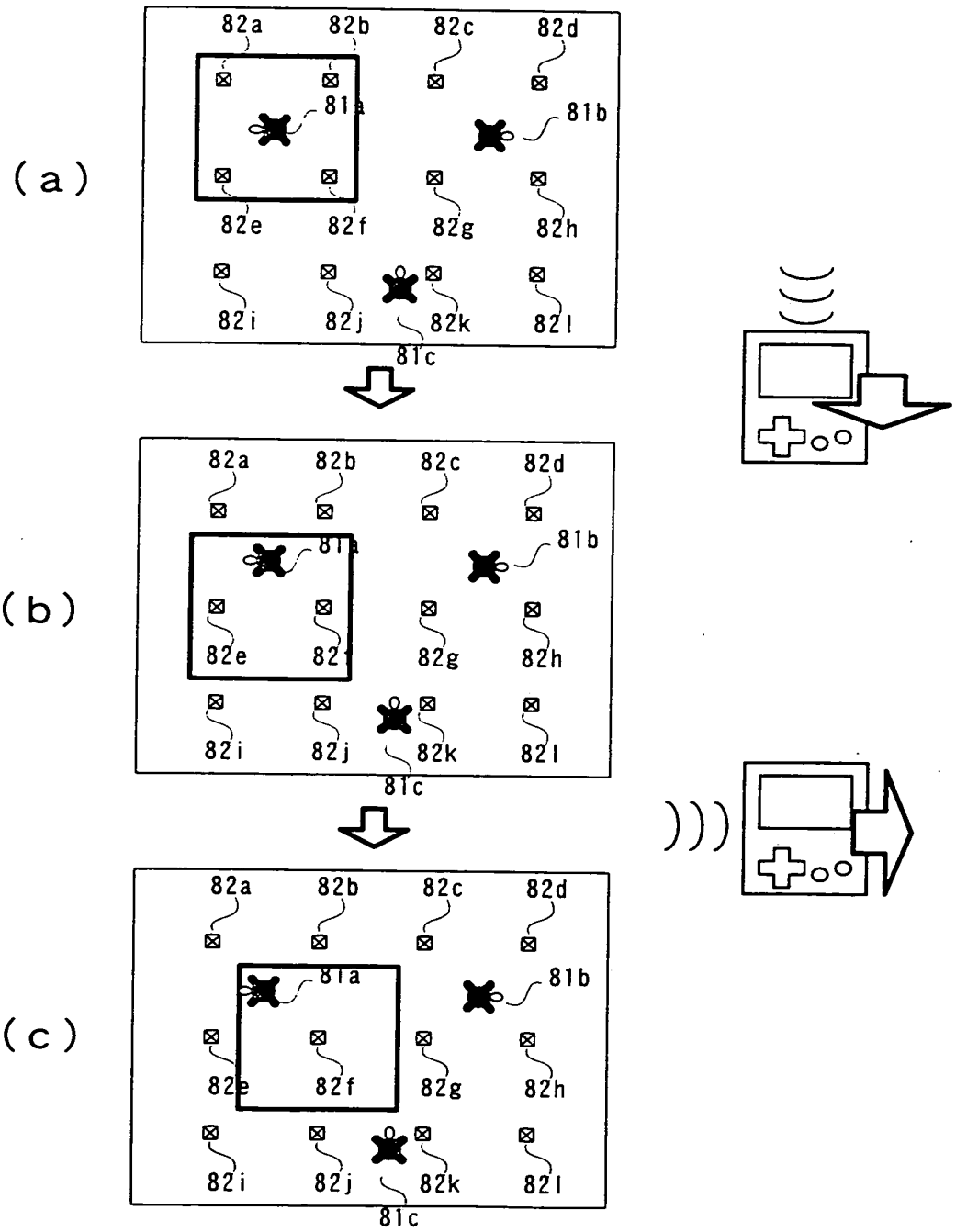
(a)
82a
82b
82c
82d
81a
81b
82e
82f
82g
82h
82i
82j
82k
82l
81c
(b)
82a
82b
82c
82d
81a
81b
82e
82g
82h
82i
82j
82k
82l
81c
(c)
82a
82b
82c
82d
81a
81b
82e
82f
82g
82h
82i
82j
82k
82l
81c

FIG. 44

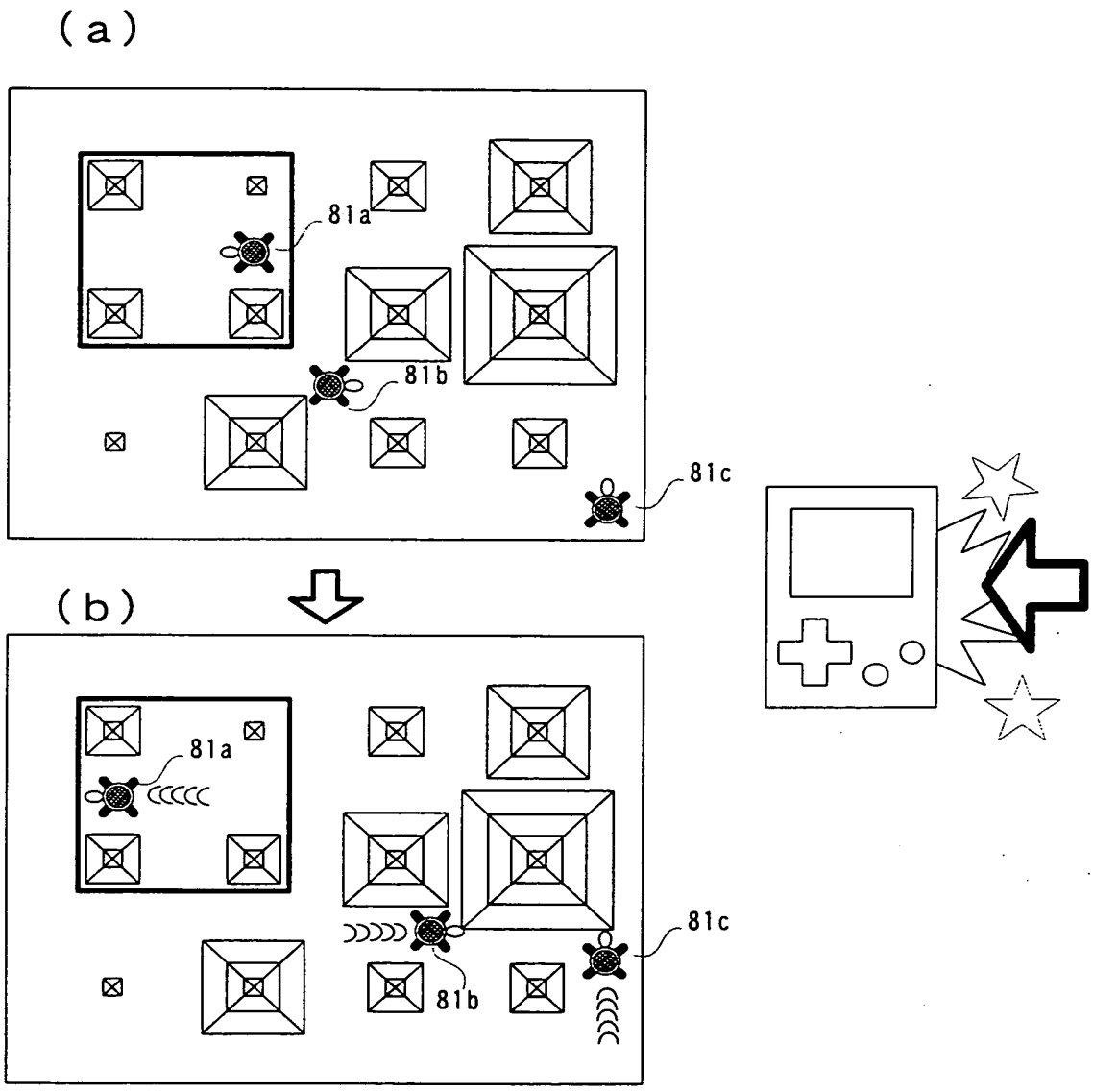

FIG. 45

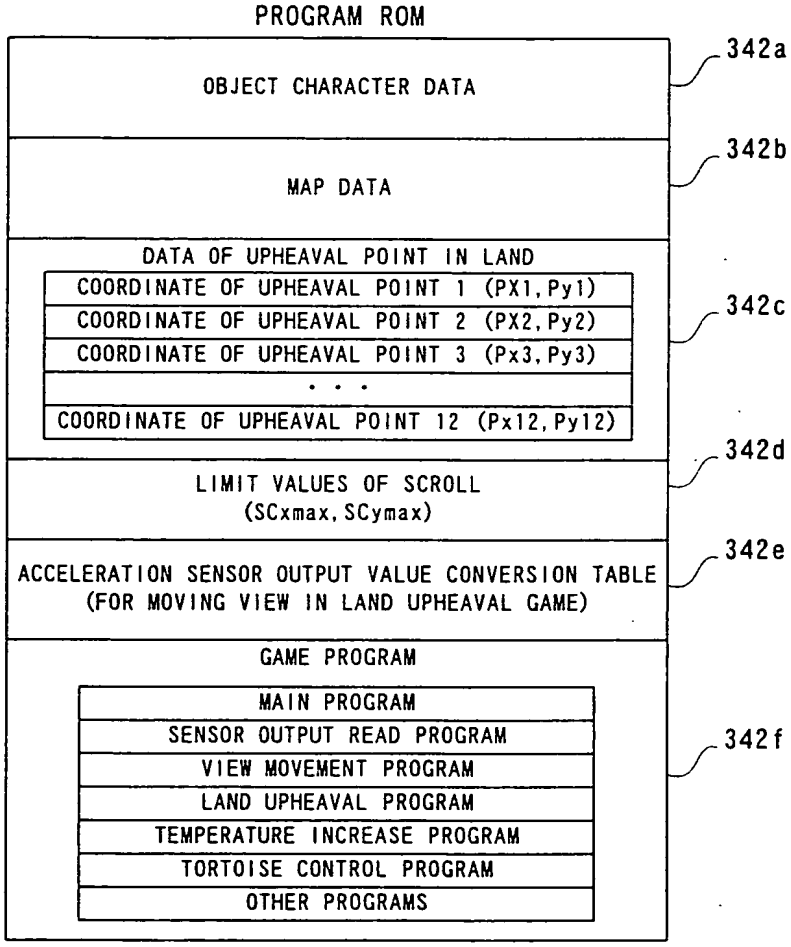
PROGRAM ROM
OBJECT CHARACTER DATA
342a
MAP DATA
342b
DATA OF UPHEAVAL POINT IN LAND
COORDINATE OF UPHEAVAL POINT 1 (PX1, Py1)
COORDINATE OF UPHEAVAL POINT 2 (PX2, Py2)
COORDINATE OF UPHEAVAL POINT 3 (Px3, Py3)
• • •
COORDINATE OF UPHEAVAL POINT 12 (Px12, Py12)
342c
LIMIT VALUES OF SCROLL
(SCxmax, SCymax)
342d
ACCELERATION SENSOR OUTPUT VALUE CONVERSION TABLE
(FOR MOVING VIEW IN LAND UPHEAVAL GAME)
342e
GAME PROGRAM
MAIN PROGRAM
SENSOR OUTPUT READ PROGRAM
VIEW MOVEMENT PROGRAM
LAND UPHEAVAL PROGRAM
TEMPERATURE INCREASE PROGRAM
TORTOISE CONTROL PROGRAM
OTHER PROGRAMS
342f

FIG. 46

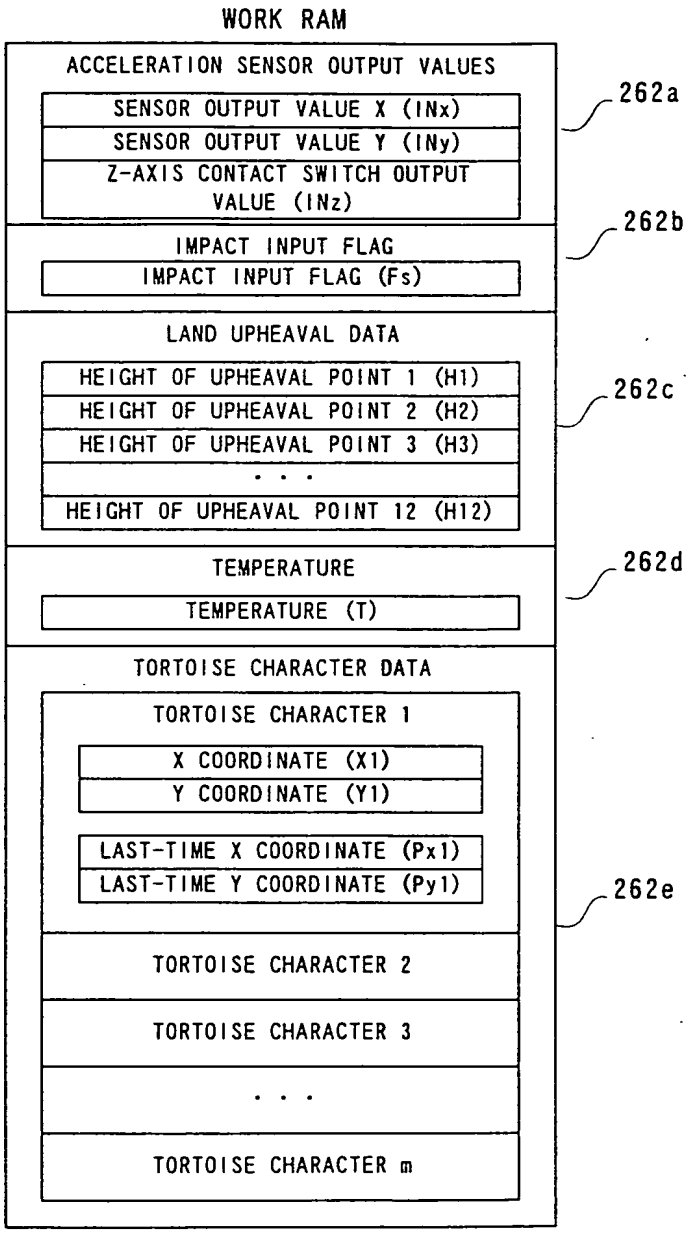
WORK RAM
ACCELERATION SENSOR OUTPUT VALUES
SENSOR OUTPUT VALUE X (INx)
SENSOR OUTPUT VALUE Y (INy)
Z-AXIS CONTACT SWITCH OUTPUT VALUE (INz)
262a
IMPACT INPUT FLAG
IMPACT INPUT FLAG (Fs)
262b
LAND UPHEAVAL DATA
HEIGHT OF UPHEAVAL POINT 1 (H1)
HEIGHT OF UPHEAVAL POINT 2 (H2)
HEIGHT OF UPHEAVAL POINT 3 (H3)
. . .
HEIGHT OF UPHEAVAL POINT 12 (H12)
262c
TEMPERATURE
TEMPERATURE (T)
262d
TORTOISE CHARACTER DATA
TORTOISE CHARACTER 1
X COORDINATE (X1)
Y COORDINATE (Y1)
LAST-TIME X COORDINATE (Px1)
LAST-TIME Y COORDINATE (Py1)
TORTOISE CHARACTER 2
TORTOISE CHARACTER 3
. . .
TORTOISE CHARACTER m
262e

FIG. 47

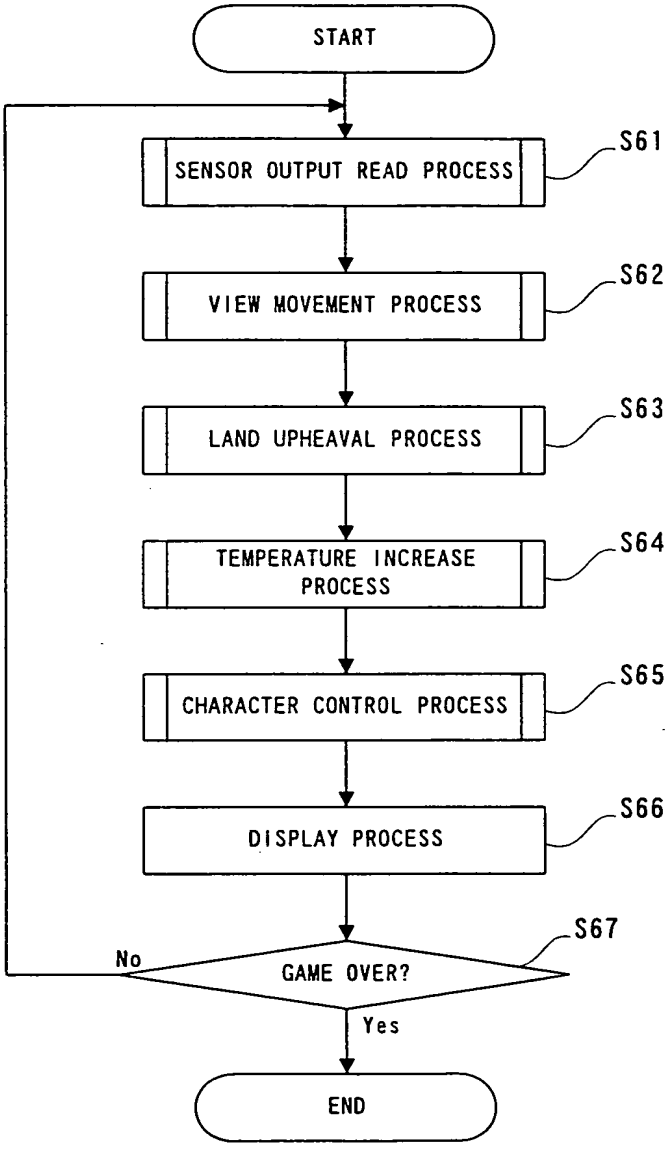
START
SENSOR OUTPUT READ PROCESS
S61
VIEW MOVEMENT PROCESS
S62
LAND UPHEAVAL PROCESS
S63
TEMPERATURE INCREASE PROCESS
S64
CHARACTER CONTROL PROCESS
S65
DISPLAY PROCESS
S66
GAME OVER?
S67
No
Yes
END

FIG. 48

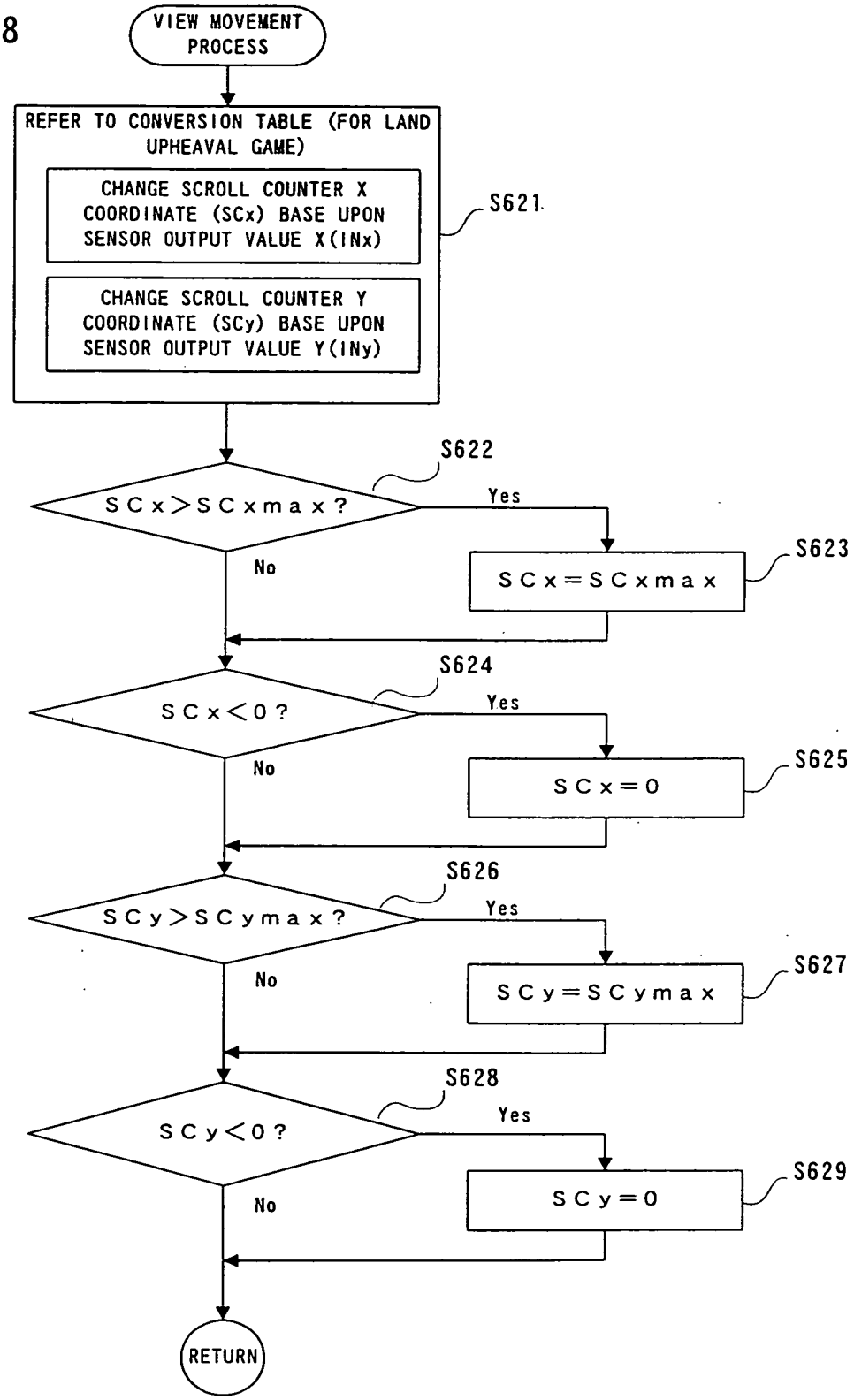
VIEW MOVEMENT PROCESS
REFER TO CONVERSION TABLE (FOR LAND UPHEAVAL GAME)
CHANGE SCROLL COUNTER X COORDINATE (SCx) BASE UPON SENSOR OUTPUT VALUE X(INx)
CHANGE SCROLL COUNTER Y COORDINATE (SCy) BASE UPON SENSOR OUTPUT VALUE Y(INy)
S621
S622
SCx>SCxmax?
Yes
No
SCx=SCxmax
S623
S624
SCx<0?
Yes
No
SCx=0
S625
S626
SCy>SCymax?
Yes
No
SCy=SCymax
S627
S628
SCy<0?
Yes
No
SCy=0
S629
RETURN

FIG. 49

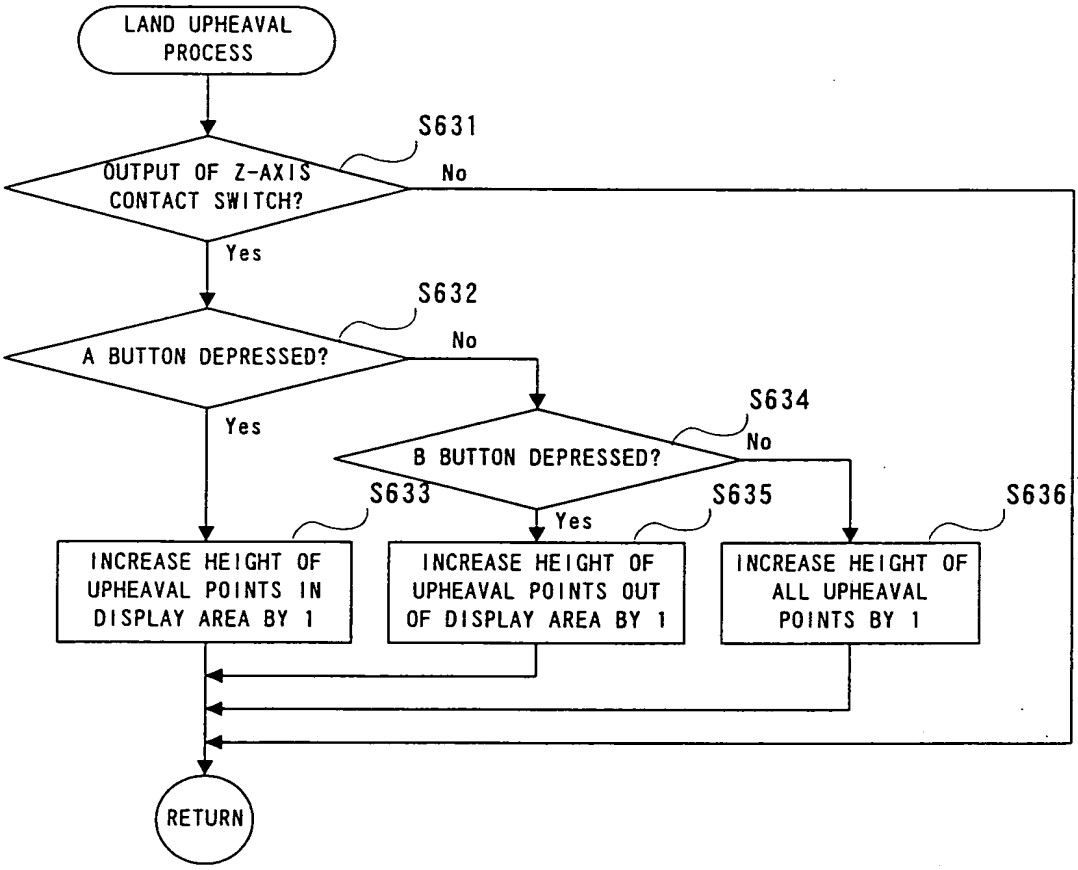
LAND UPHEAVAL PROCESS
S631
OUTPUT OF Z-AXIS CONTACT SWITCH?
No
Yes
S632
A BUTTON DEPRESSED?
No
Yes
S634
B BUTTON DEPRESSED?
No
Yes
S633
S635
S636
INCREASE HEIGHT OF UPHEAVAL POINTS IN DISPLAY AREA BY 1
INCREASE HEIGHT OF UPHEAVAL POINTS OUT OF DISPLAY AREA BY 1
INCREASE HEIGHT OF ALL UPHEAVAL POINTS BY 1
RETURN

FIG. 50

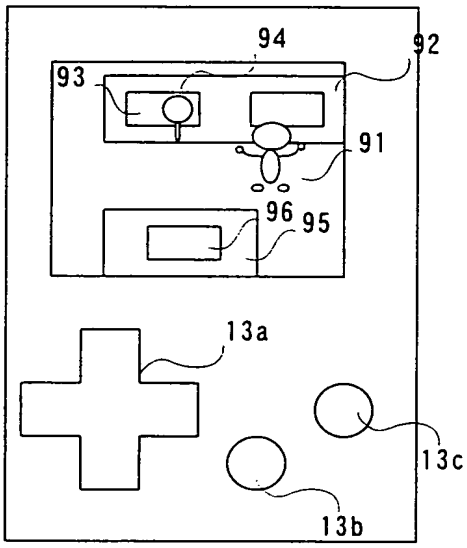

FIG. 51

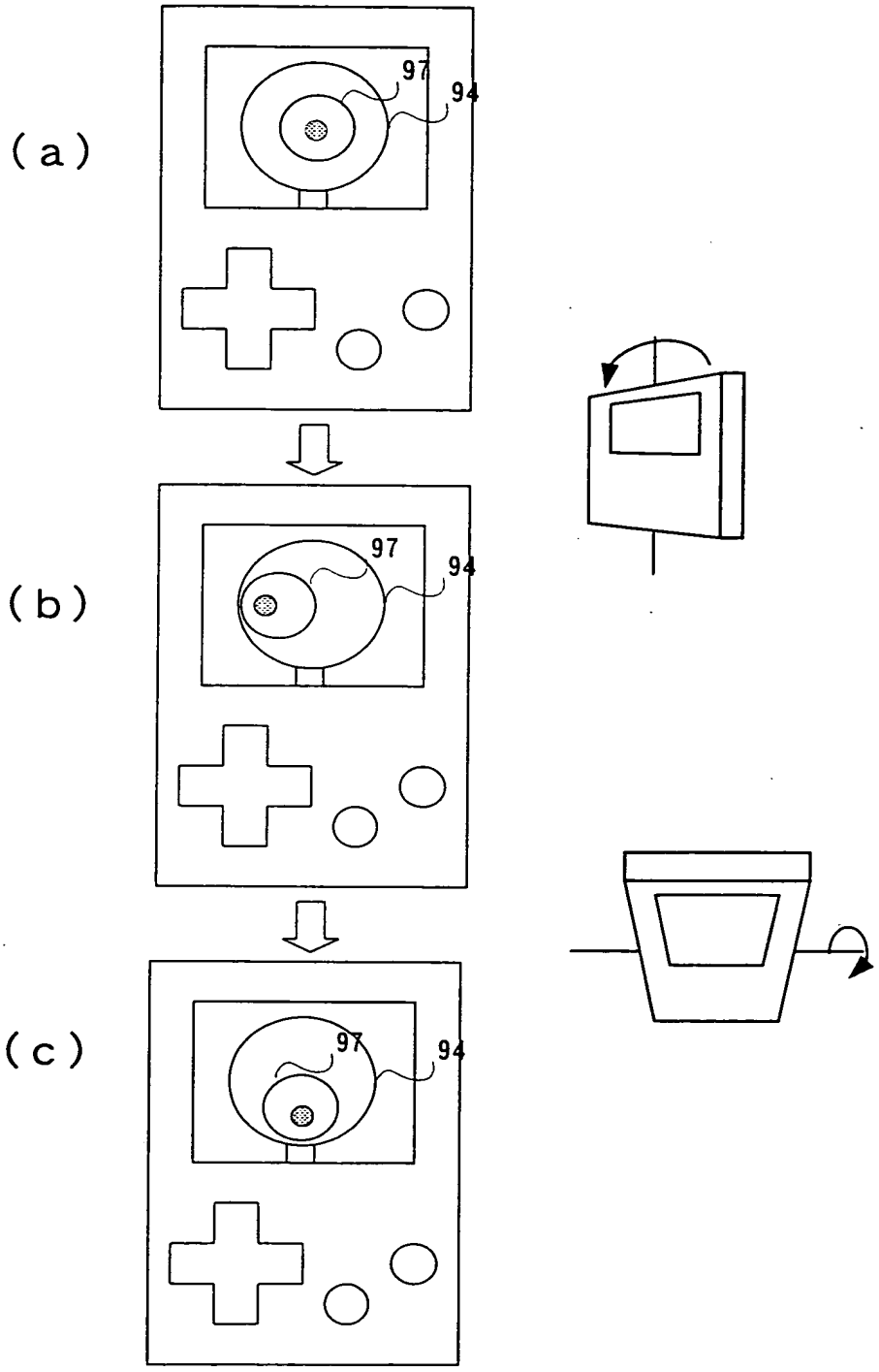

FIG. 52

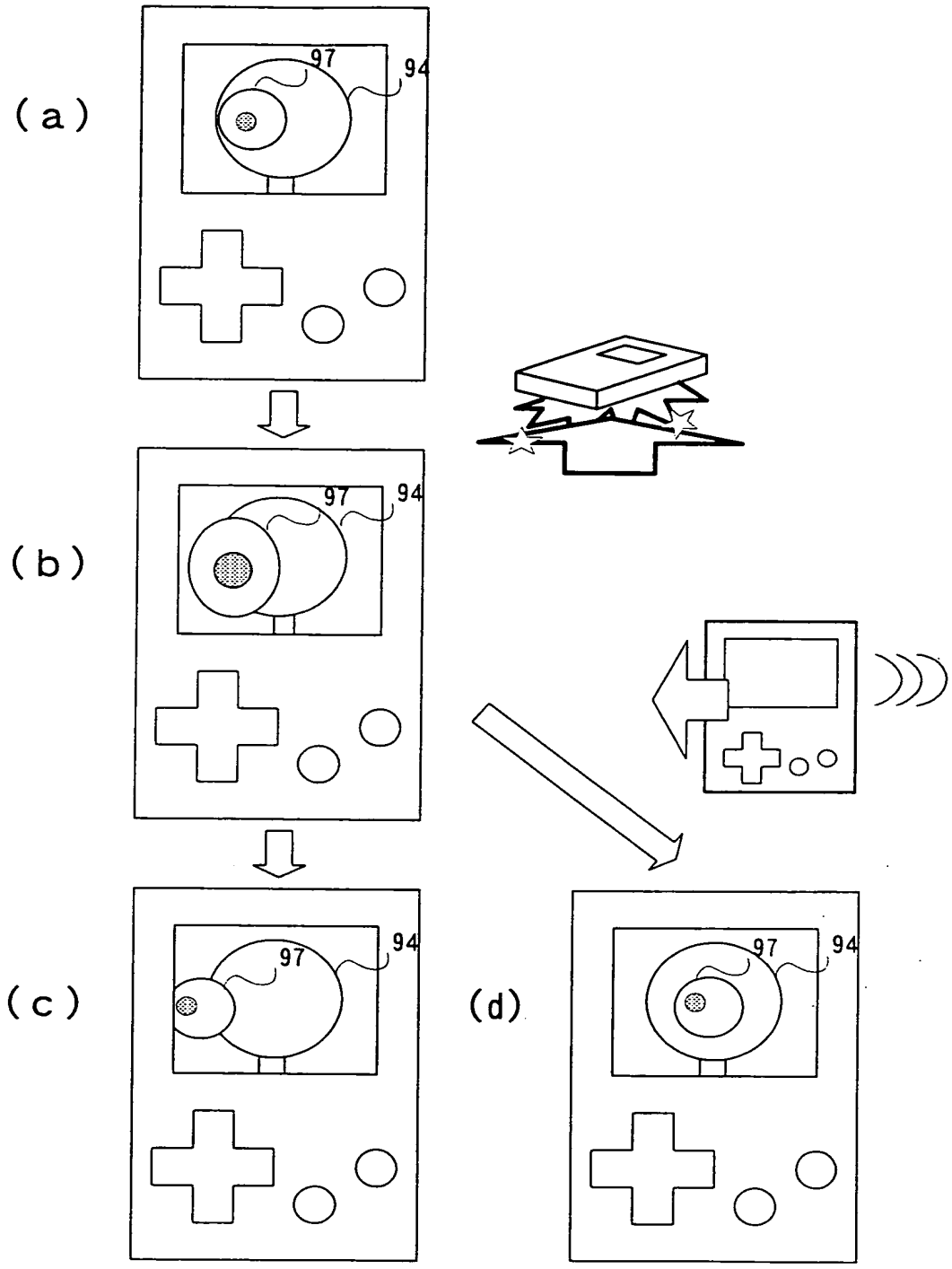

FIG. 53

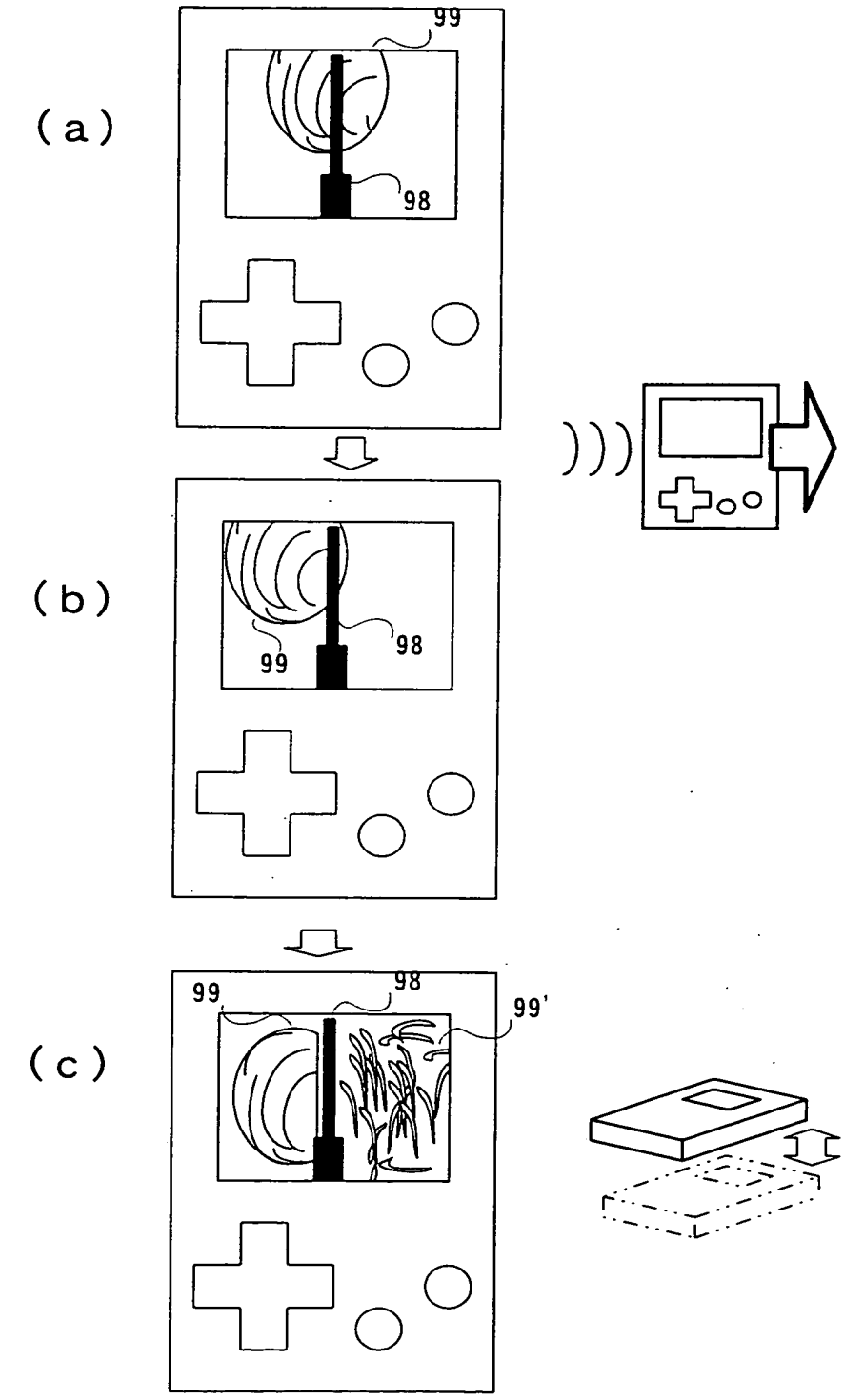

FIG. 54

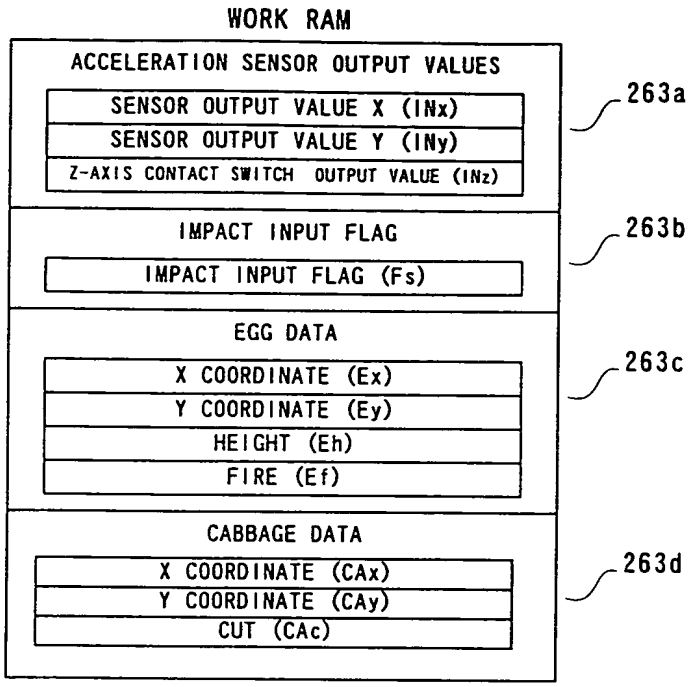
WORK RAM
ACCELERATION SENSOR OUTPUT VALUES
SENSOR OUTPUT VALUE X (INx)
SENSOR OUTPUT VALUE Y (INy)
Z-AXIS CONTACT SWITCH OUTPUT VALUE (INz)
263a
IMPACT INPUT FLAG
IMPACT INPUT FLAG (Fs)
263b
EGG DATA
X COORDINATE (Ex)
Y COORDINATE (Ey)
HEIGHT (Eh)
FIRE (Ef)
263c
CABBAGE DATA
X COORDINATE (CAx)
Y COORDINATE (CAy)
CUT (CAc)
263d

FIG. 55

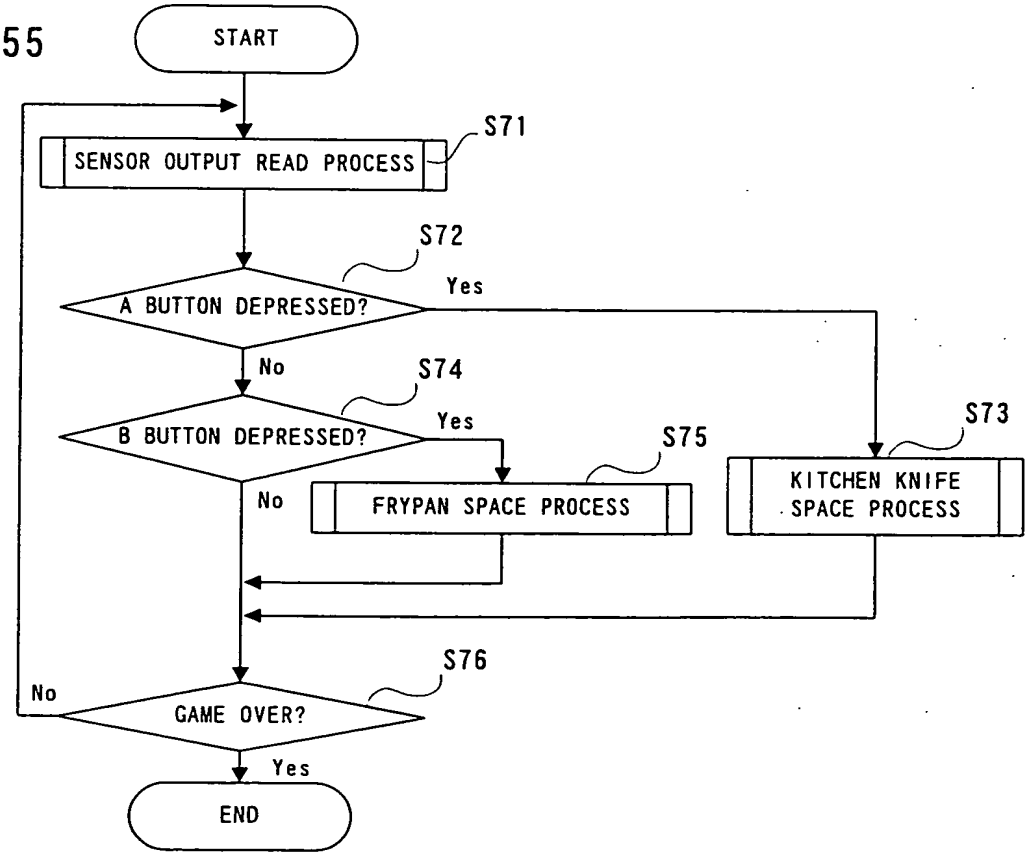
START
S71
SENSOR OUTPUT READ PROCESS
S72
A BUTTON DEPRESSED?
Yes
No
S74
B BUTTON DEPRESSED?
Yes
No
S75
FRYPAN SPACE PROCESS
S73
KITCHEN KNIFE SPACE PROCESS
S76
GAME OVER?
No
Yes
END

FIG. 56

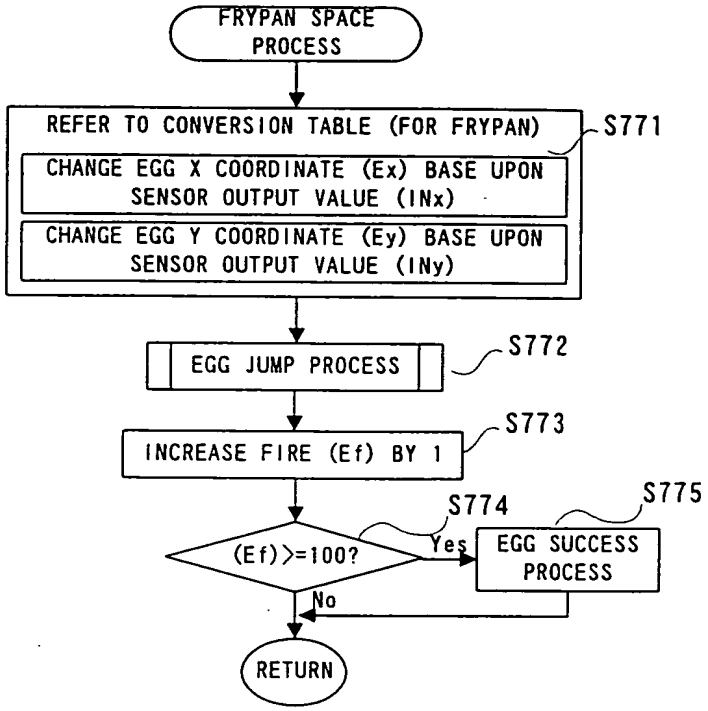
FRYPAN SPACE PROCESS
REFER TO CONVERSION TABLE (FOR FRYPAN)
S771
CHANGE EGG X COORDINATE (Ex) BASE UPON SENSOR OUTPUT VALUE (INx)
CHANGE EGG Y COORDINATE (Ey) BASE UPON SENSOR OUTPUT VALUE (INy)
EGG JUMP PROCESS
S772
INCREASE FIRE (Ef) BY 1
S773
S774
S775
(Ef)>=100?
Yes
EGG SUCCESS PROCESS
No
RETURN

FIG. 57

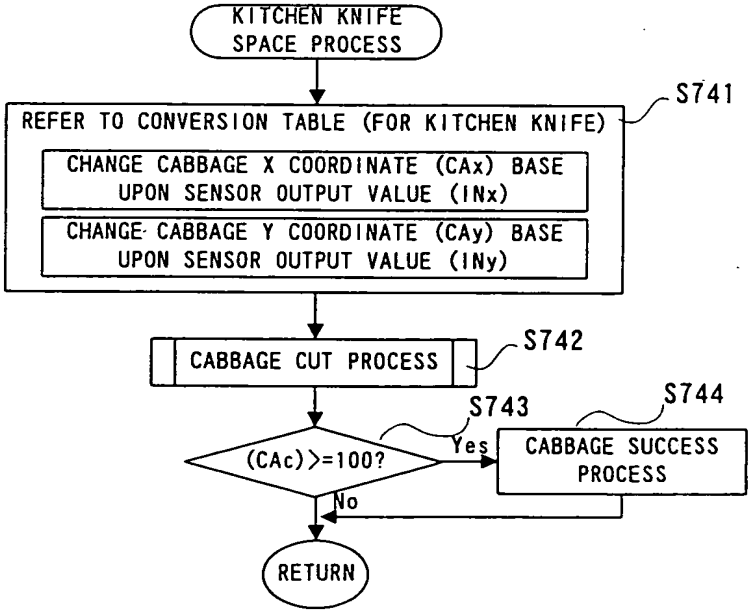
KITCHEN KNIFE SPACE PROCESS
REFER TO CONVERSION TABLE (FOR KITCHEN KNIFE)
S741
CHANGE CABBAGE X COORDINATE (CAx) BASE UPON SENSOR OUTPUT VALUE (INx)
CHANGE CABBAGE Y COORDINATE (CAy) BASE UPON SENSOR OUTPUT VALUE (INy)
CABBAGE CUT PROCESS
S742
S743
S744
(CAc)>=100?
Yes
CABBAGE SUCCESS PROCESS
No
RETURN

FIG. 58

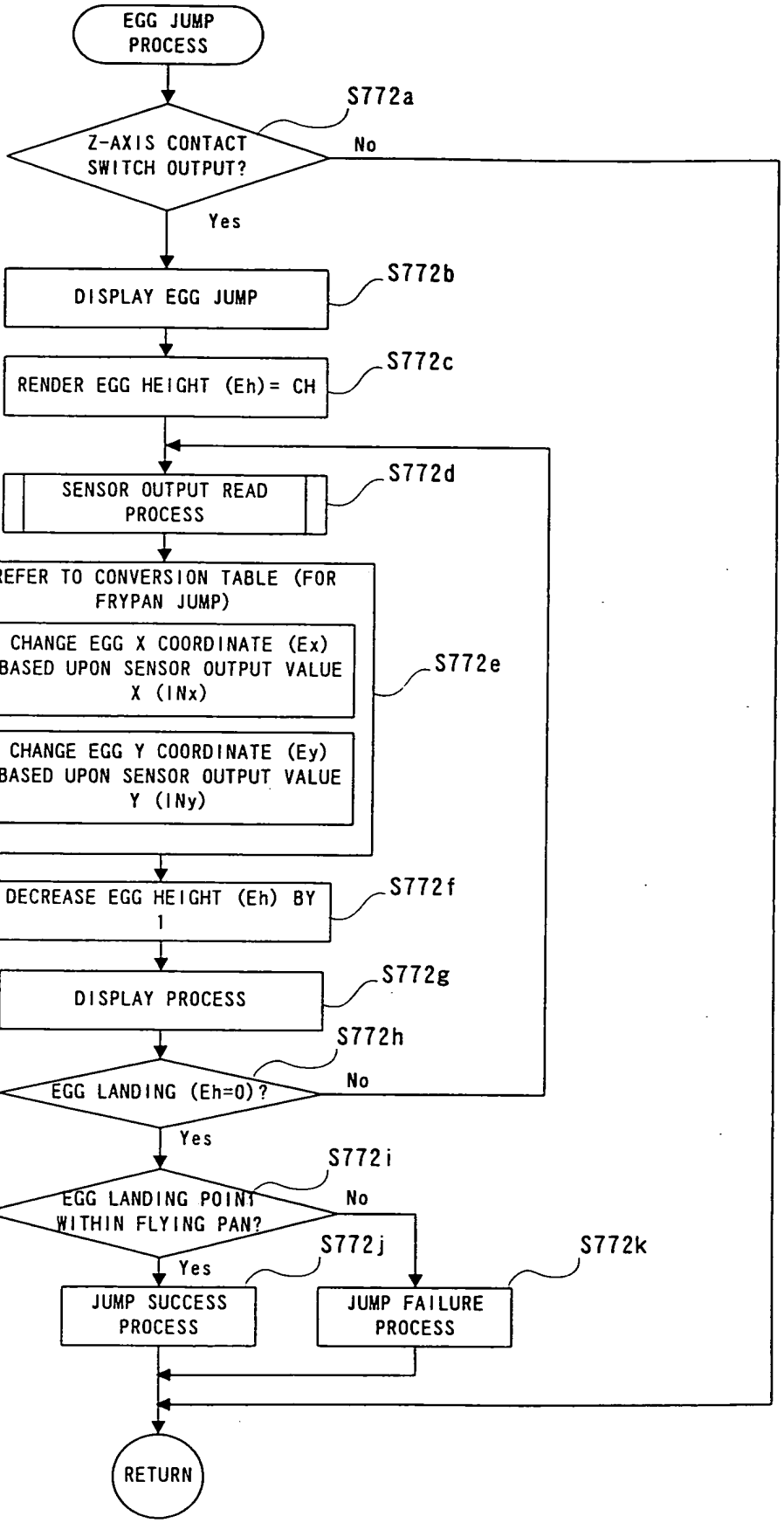
EGG JUMP PROCESS
S772a
Z-AXIS CONTACT SWITCH OUTPUT?
No
Yes
DISPLAY EGG JUMP
S772b
RENDER EGG HEIGHT (Eh)= CH
S772c
SENSOR OUTPUT READ PROCESS
S772d
REFER TO CONVERSION TABLE (FOR FRYPAN JUMP)
CHANGE EGG X COORDINATE (Ex) BASED UPON SENSOR OUTPUT VALUE X (INx)
CHANGE EGG Y COORDINATE (Ey) BASED UPON SENSOR OUTPUT VALUE Y (INy)
S772e
DECREASE EGG HEIGHT (Eh) BY 1
S772f
DISPLAY PROCESS
S772g
S772h
EGG LANDING (Eh=0)?
No
Yes
S772i
EGG LANDING POINT WITHIN FLYING PAN?
No
Yes
S772j
S772k
JUMP SUCCESS PROCESS
JUMP FAILURE PROCESS
RETURN

FIG. 59

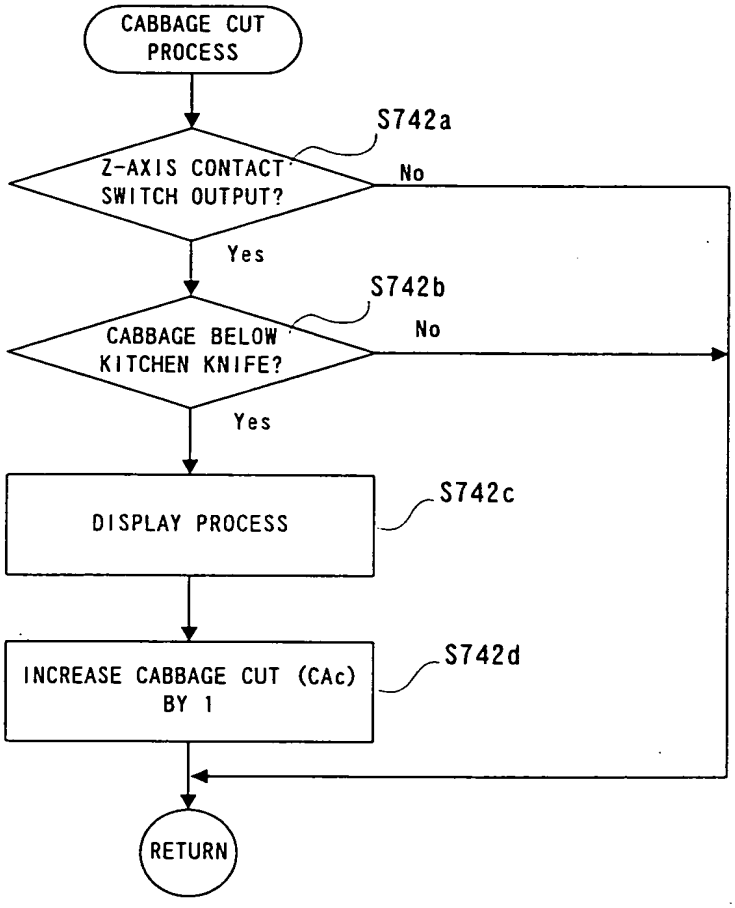
CABBAGE CUT PROCESS
S742a
Z-AXIS CONTACT SWITCH OUTPUT?
No
Yes
S742b
CABBAGE BELOW KITCHEN KNIFE?
No
Yes
DISPLAY PROCESS
S742c
INCREASE CABBAGE CUT (CAc) BY 1
S742d
RETURN

FIG. 60

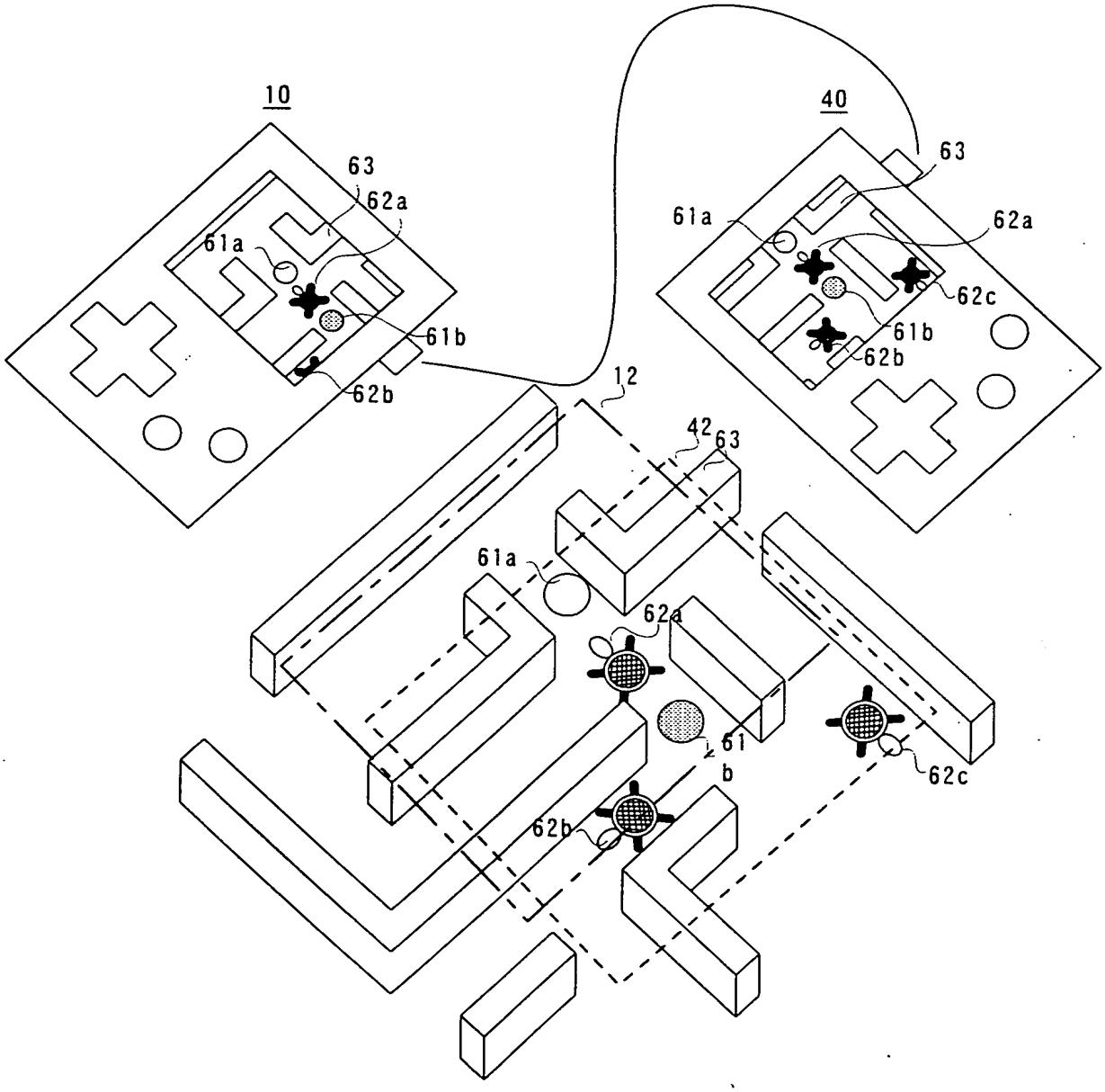

FIG. 61

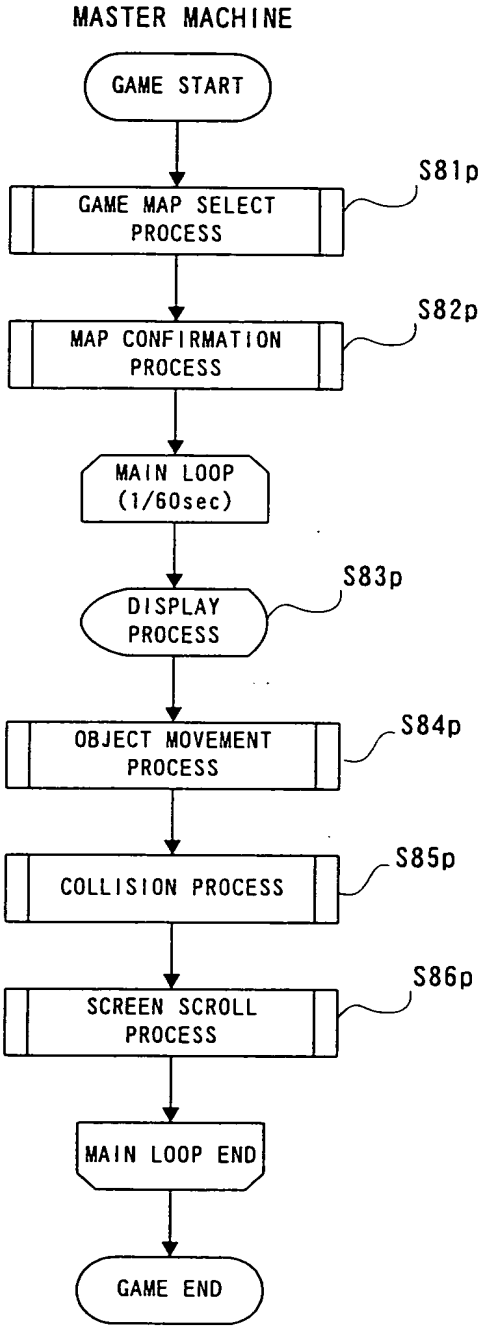
MASTER MACHINE
GAME START
GAME MAP SELECT PROCESS
S81p
MAP CONFIRMATION PROCESS
S82p
MAIN LOOP (1/60sec)
DISPLAY PROCESS
S83p
OBJECT MOVEMENT PROCESS
S84p
COLLISION PROCESS
S85p
SCREEN SCROLL PROCESS
S86p
MAIN LOOP END
GAME END

FIG. 62

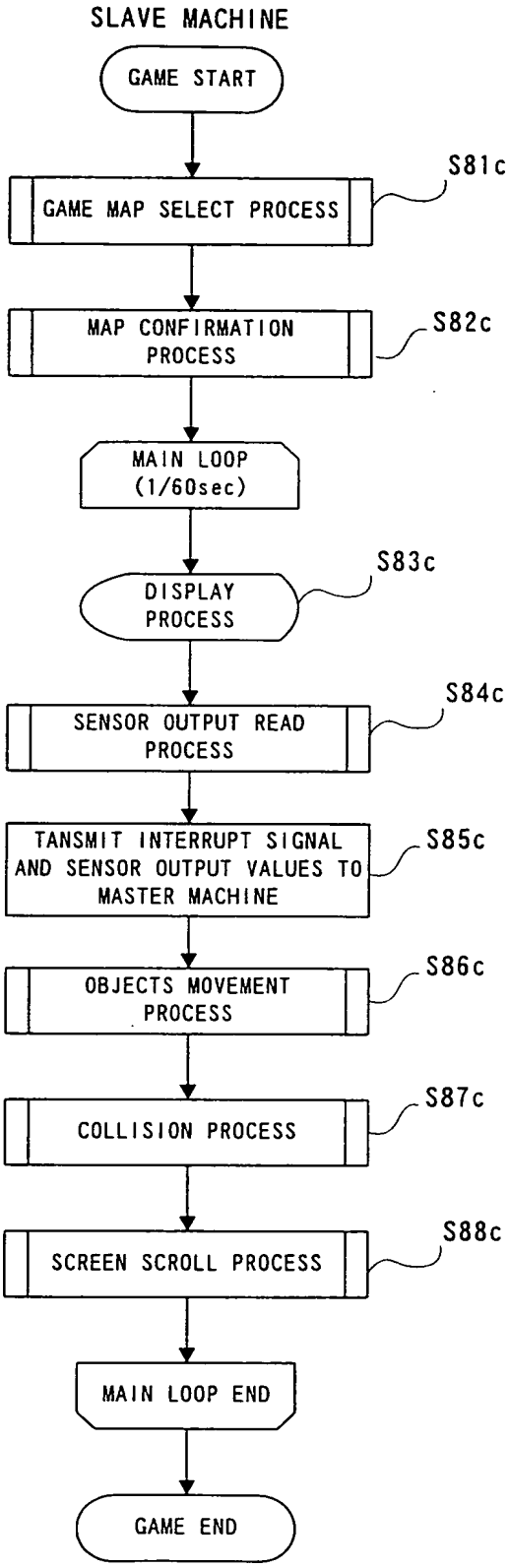
SLAVE MACHINE
GAME START
GAME MAP SELECT PROCESS
S81c
MAP CONFIRMATION PROCESS
S82c
MAIN LOOP (1/60sec)
DISPLAY PROCESS
S83c
SENSOR OUTPUT READ PROCESS
S84c
TANSMIT INTERRUPT SIGNAL AND SENSOR OUTPUT VALUES TO MASTER MACHINE
S85c
OBJECTS MOVEMENT PROCESS
S86c
COLLISION PROCESS
S87c
SCREEN SCROLL PROCESS
S88c
MAIN LOOP END
GAME END

FIG. 63

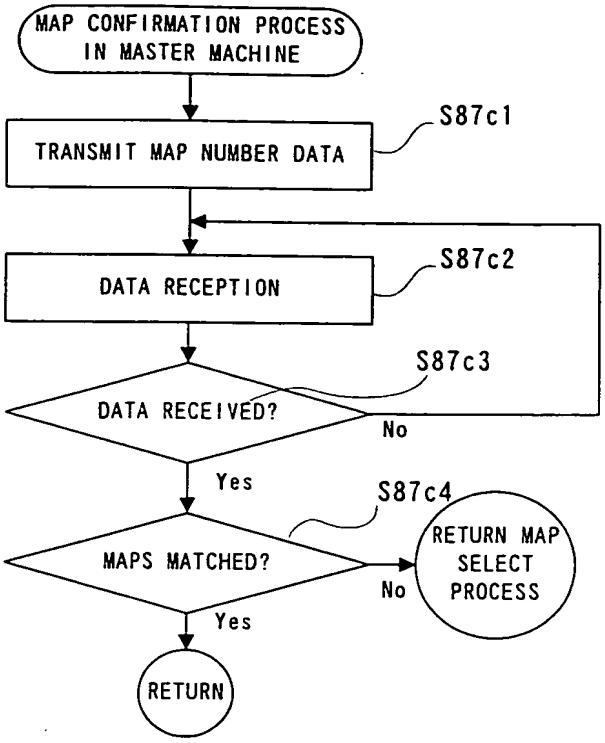
MAP CONFIRMATION PROCESS IN MASTER MACHINE
TRANSMIT MAP NUMBER DATA
S87c1
DATA RECEPTION
S87c2
DATA RECEIVED?
S87c3
No
Yes
MAPS MATCHED?
S87c4
No
RETURN MAP SELECT PROCESS
Yes
RETURN

FIG. 64

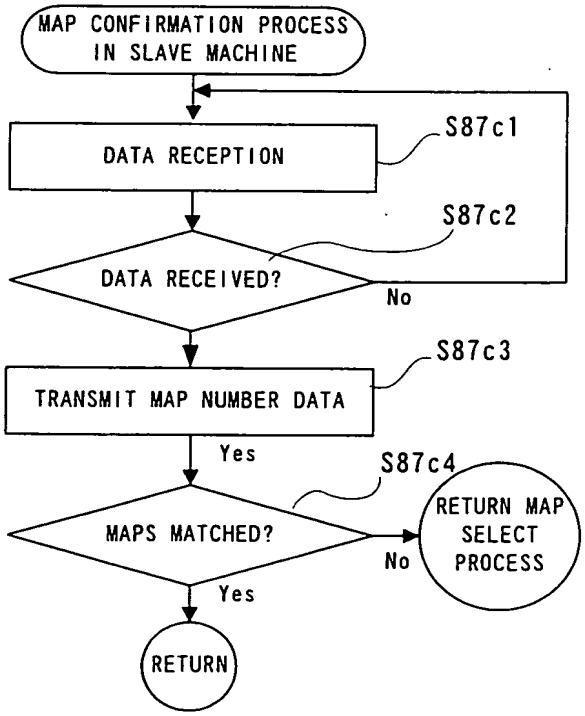
MAP CONFIRMATION PROCESS IN SLAVE MACHINE
DATA RECEPTION
S87c1
DATA RECEIVED?
S87c2
No
TRANSMIT MAP NUMBER DATA
S87c3
Yes
MAPS MATCHED?
S87c4
No
RETURN MAP SELECT PROCESS
Yes
RETURN

FIG. 65

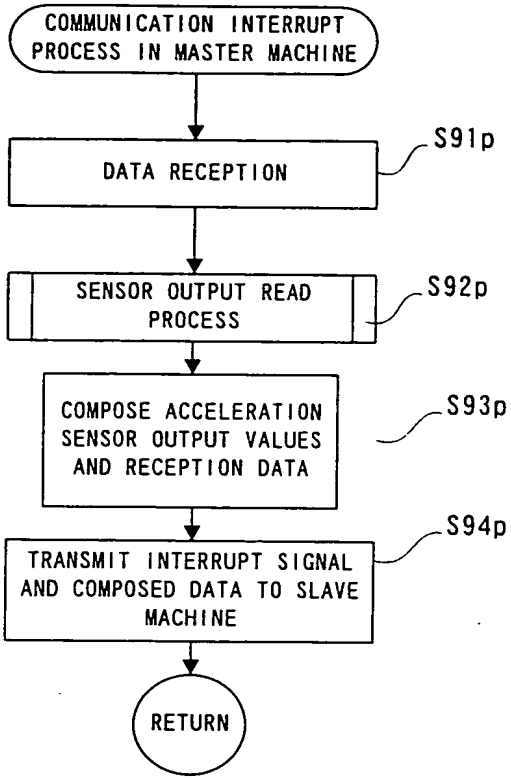
COMMUNICATION INTERRUPT PROCESS IN MASTER MACHINE
DATA RECEPTION
S91p
SENSOR OUTPUT READ PROCESS
S92p
COMPOSE ACCELERATION SENSOR OUTPUT VALUES AND RECEPTION DATA
S93p
TRANSMIT INTERRUPT SIGNAL AND COMPOSED DATA TO SLAVE MACHINE
S94p
RETURN

FIG. 66

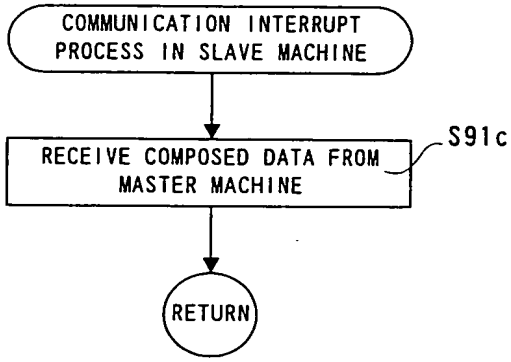
COMMUNICATION INTERRUPT PROCESS IN SLAVE MACHINE
RECEIVE COMPOSED DATA FROM MASTER MACHINE
S91c
RETURN

FIG. 67

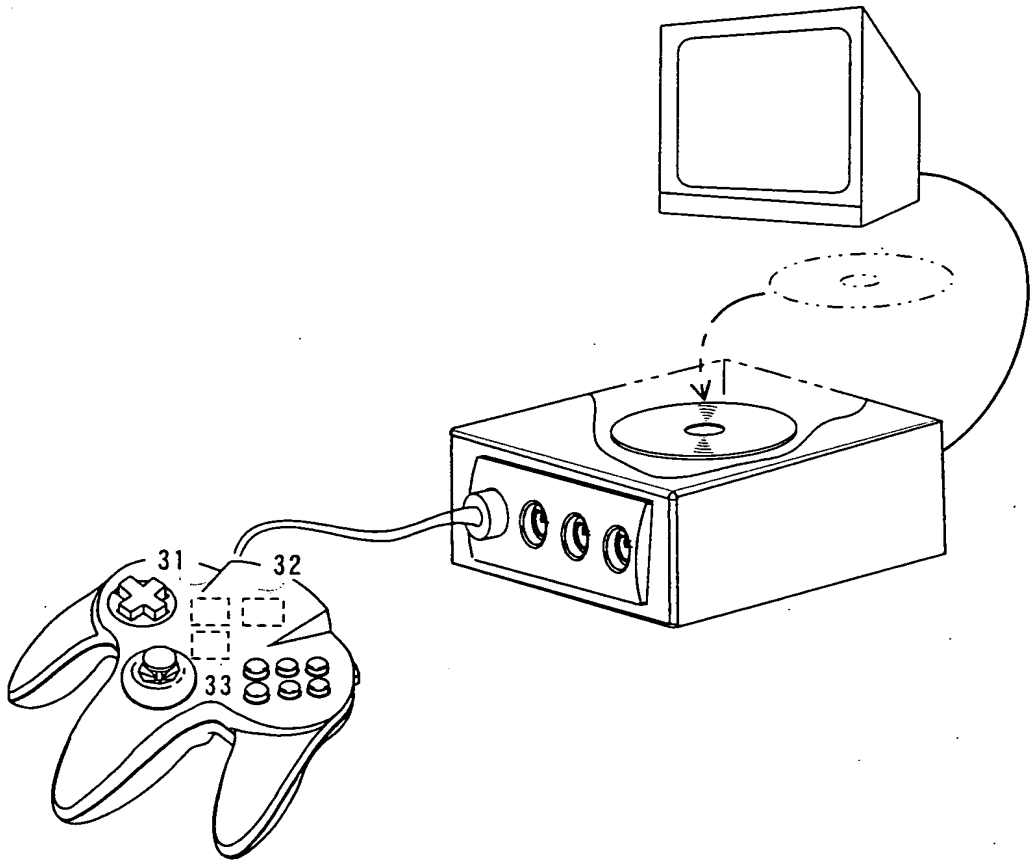
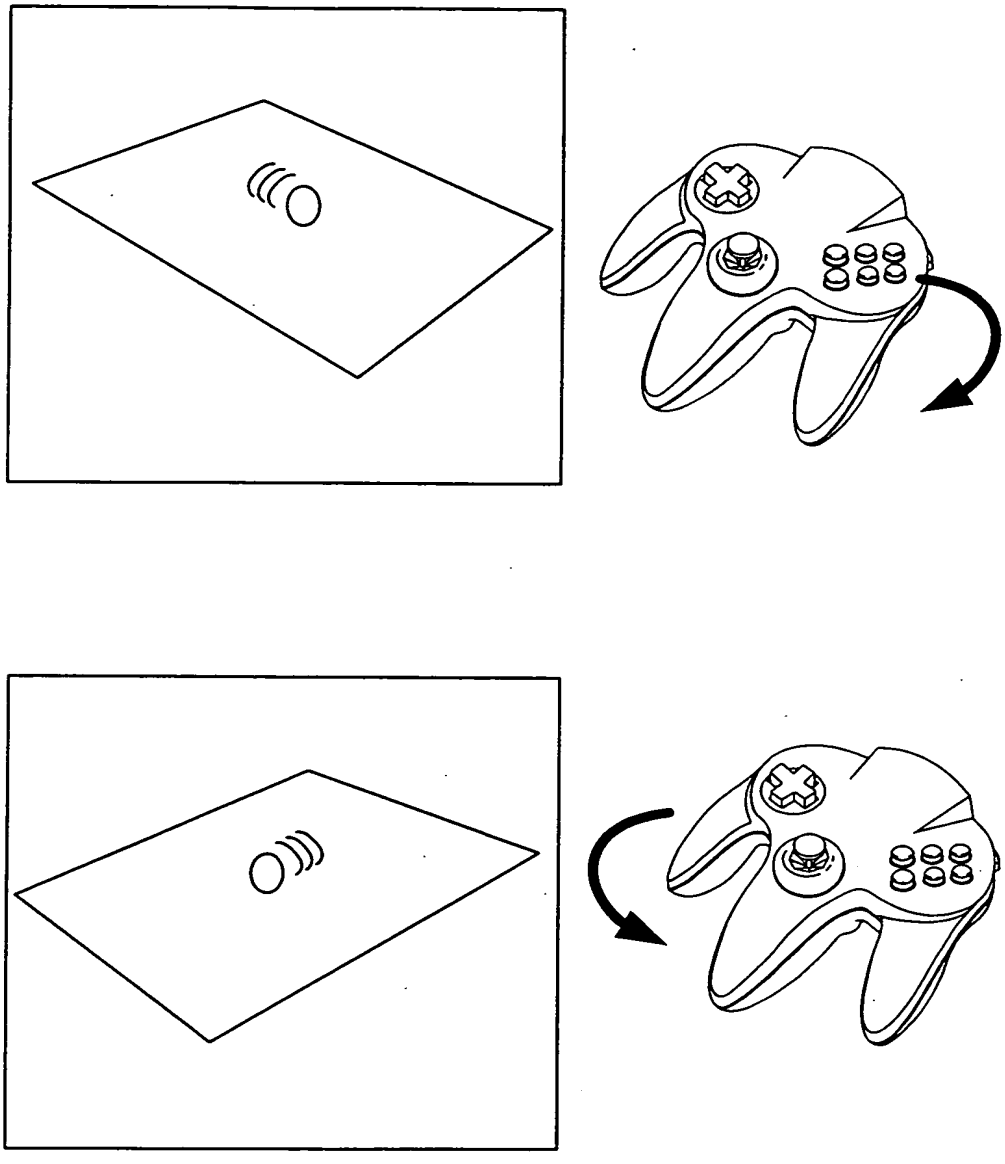
FIG. 68